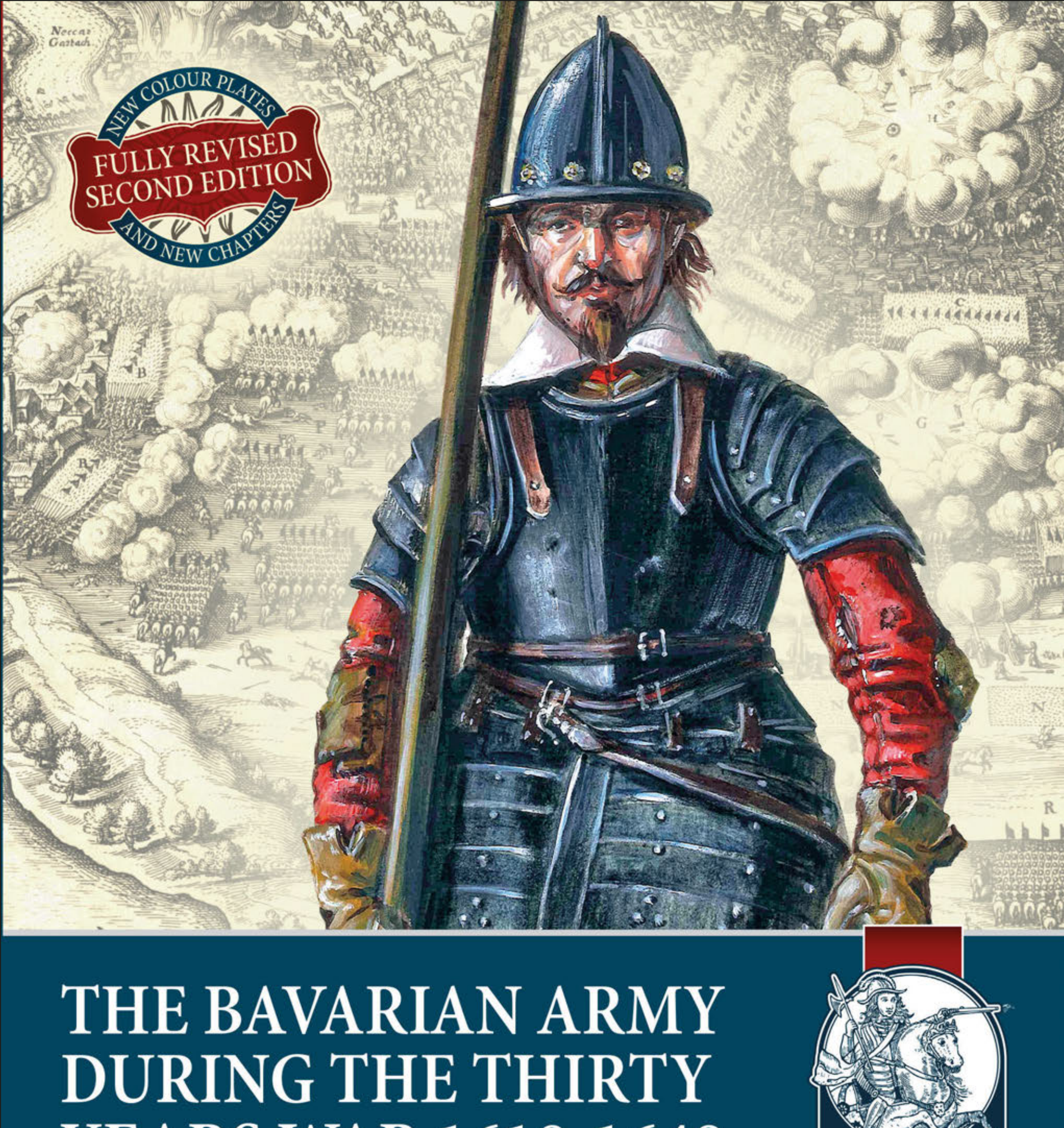

NEW COLOUR PLATES
FULLY REVISED
SECOND EDITION
AND NEW CHAPTERS

THE BAVARIAN ARMY DURING THE THIRTY YEARS WAR 1618-1648

THE BACKBONE OF THE CATHOLIC LEAGUE

LAURENCE SPRING

Century of the Soldier
1618-1721
No.69

THE BAVARIAN ARMY DURING THE THIRTY YEARS WAR 1618–1648

The Backbone of the Catholic League

Revised Second Edition

Laurence Spring

‘This is the Century of the Soldier’, Fulvio Testi, Poet, 1641

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Chronology

Bohemian War 1618–1621

1618	**23 May,** Defenestration of Prague, insurrection of Bohemia and setting up of a government of 30 directors
	August, Imperial troops under Bucquoy and Dampierre invade Bohemia to suppress insurrection
	21 November, Bohemian Army under General Ernst von Mansfeld captures Pilsen
1619	**20 March,** Emperor Matthias dies, and is succeeded by Ferdinand I
	May, Bohemian troops invade Moravia
	June, Bohemian army under General Thurn besieges Vienna
	16 June, Mansfeld is defeated by Bucquoy at the battle of Zablat
	5 July, Dampierre is defeated at Dolni
	26 August, Frederick V, Elector of the Palatinate, elected king of Bohemia
	8 October, Maximilian of Bavaria agrees to help Ferdinand II crush the Bohemian insurrection
	November, Bohemian Army again besieges Vienna
1620	**September,** joint offensive by the Imperial and Catholic League armies under Tilly forces the Bohemian army to return to Bohemia
	8 November, Tilly defeats the Bohemian army at the battle of White Mountain near Prague
1621	**21 June,** 21 representatives of the Bohemian estates are beheaded in Prague

Palatinate War 1621–1623

1621	**28 July,** an Imperialist force is defeated at Neutitschein in Moravia
1622	**January,** Pressburg Peace between Ferdinand II and Bethlen Gábor
	27 April, Tilly is defeated by Mansfeld at Wiesloch
	6 May, Tilly defeats George Frederick of Baden-Durlach's army at Wimpfen
	20 June, Tilly defeats Christian of Brunswick's army at Höchst
	6 August, Tilly again defeats Christian of Brunswick's army, at Stadtlohn

Danish War 1625–1629

1625	**25 July,** Wallenstein raises an army for the Emperor

1626	**26 April,** Wallenstein defeats Mansfeld's army at Dessau
1627	**27 August,** Tilly and Wallenstein defeat Christian of Brunswick's army at Lutter
1628	**23 May–3 August,** Wallenstein fails to capture Stralsund
	2 September, part of Wallenstein's army defeats Christian IV of Denmark's army at Wolgast
1629	**6 March,** Ferdinand II issues the Edict of Restitution, ordering that all church property confiscated after the Peace of Augsburg be restored to the Catholic Church
	22 May, peace signed between Christian IV of Denmark and Ferdinand II
1630	**13 August,** Wallenstein dismissed as commander-in-chief of Imperialist forces

Swedish War 1630–1635

1630	**24 June,** King Gustavus Adolphus of Sweden lands in Pomerania
1631	**20 May,** Tilly's troops storm the city of Magdeburg
	17 September, a Swedish–Saxon army defeats Tilly at the battle of Breitenfeld
	December, Wallenstein reappointed Imperialist commander-in-chief
1632	**4–14 April,** Tilly is defeated while trying to prevent Gustavus Adolphus' army crossing the river Lech near Rain
	3 September, Gustavus Adolphus is repulsed by Wallenstein near Nuremberg
	16 November, battle of Lützen, between the forces of Wallenstein and Gustavus Adolphus, where the latter is killed
1633	Wallenstein allegedly begins negotiating for peace
1634	**25 February,** Wallenstein is assassinated at Eger
	6 September, a Bavarian–Imperialist army defeats the Swedish army at Nördlingen
1635	**30 May,** Peace of Prague concluded between the Emperor and Elector of Saxony and several other Protestant princes

French–Swedish War 1635–1648

1636	**4 October,** a Swedish army defeated at Wittstock by an Imperialist–Saxon army
1637	Emperor Ferdinand II dies and is succeeded by his son Ferdinand III
1638	**28 February,** a Bavarian army is defeated by Prince Bernard of Saxe-Weimar at the battle of Rheinfelden
1642	**2 November,** a Swedish army beats the Imperialist Army at the second battle of Breitenfeld
1643	Denmark re-enters the war, this time on the side of the Emperor
	5 May, a Bavarian army defeats the French at the battle of Tuttlingen
1645	**23 February,** a Swedish army beats the Imperialists at the battle of Jankau

	3 August, a Bavarian army is defeated by the Prince of Condé's army at Allerheim
1646	A Franco-Swedish force invades Bavaria
1647	Bavaria is forced to conclude peace with France and Sweden
1648	**16 May,** a Franco-Swedish force defeats a Bavarian–Imperialist army at Augsburg
	24 October, after three years of negotiations peace is finally declared at Münster and Osnabruck

Acknowledgements

I would like to thank the staff of the Bavarian State Archives, the Bavarian State Library, the Bavarian Army Museum, the British Library, the National Archives at Kew, England, the staff of the Swedish Army Museum in Stockholm and the French National Library.

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Laurence Spring, 2017

2nd edition, 2021

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Introduction

There were many states that formed Germany during the early seventeenth century, and one of the largest was Bavaria. Its origins dated back to Roman times as the province of Noricum. In the fifth century this province was ruled by the Ostrogoth king, Theodoric the Great (*c.*454–526) and from 1180 the Wittelsbach family ruled it until Germany became a republic in 1918.

In theory the Dukes of Bavaria owed their allegiance to the Holy Roman Emperor, but in practice, like other Germanic states, Bavaria enjoyed a semi-autonomous existence and the Dukes were able to discuss their grievances in one of the Imperial courts. For more important matters the emperor could call an Imperial Diet, which the electors and the various free cities within the Empire could cast their vote. However, there were just seven electors of the Empire: the electors Palatine, Saxony, and Brandenburg, the King of Bohemia and the archbishops of Mainz, Trier and Cologne who could elect a new emperor, although this had become a formality, with the throne going to a member of the Habsburg family.

Although Bavaria was one of the largest and more powerful states within the Empire it would not be until 1623 that Maximilian I of Bavaria enjoyed the status of elector, albeit privately. In this he had the support of the Pope and the Jesuit order.

With the Defenestration of Prague on 23 May 1618 the Bohemian gentry offered Fredrick V, Elector Palatine, the crown of Bohemia after they had deposed Ferdinand due to his Catholic policies. The position as King of Bohemia was not only traditionally seen as the emperor elect's title, but gave Frederick two votes in the Diet, upsetting the balance of power within the Empire. With Frederick's defeat at the battle of White Mountain in November 1620 and the subsequent invasion of the Palatinate, Ferdinand, who had by now become the emperor of the Holy Roman Empire, deposed Frederick and gave Maximilian his title as elector, albeit secretly. This further upset the balance of power.

Maximilian had come to the Bavarian throne aged 24 when his father abdicated, leaving the country almost bankrupt. However, Maximilian not only managed to turn the economy around but within 20 years had made Bavaria a wealthy country. He was devoutly Catholic, rising at about 4:00 a.m., and after an hour's prayer he set to work, breaking off to attend Matins two or three times in a morning, and an hour of Vespers in the afternoon. He worked late into the evening and said more prayers before he went to sleep. Despite being a Catholic he had some very "Puritan" values, disliking excesses of drinking and eating. After his death in 1651 his attendants found that he travelled with a hair shirt and implements for self-flagellation. However, although he had his own Jesuit confessor he only followed his advice when he agreed with it.[1]

It is estimated that the population of Bavaria was about one million at beginning of the seventeenth century, with 34 cities, 93 market towns, 4,700 towns, and 104 monasteries. More than 80 percent of the land was agricultural or common land, and according to Father Henry Fitzsimon who accompanied the Bavarian Army in 1620, such was the large quantity of pigs in Bavaria that the Bavarians were known as "porkers". In 1606 there were 30,565 farms in the Upper Palatinate housing 118,000 families.[2]

With the arrival of the Reformation during the sixteenth century the Empire divided into Lutheran and Catholic States, among the latter being Bavaria, while the former included the Palatinate. Finally, after a bloody war between the two religions, the Peace of Augsburg was signed in 1555. True, this peace was not perfect since neither side could have predicted a new form of Protestantism – Calvinism – appearing, nor was it strictly adhered to since those who converted after this date did not give up their lands as the Peace of Augsburg required. However, whilst the Netherlands and France erupted into civil war over religion (among other issues), the Augsburg agreement did bring peace within the Empire for the next 63 years. In fact the only war the Empire was directly involved in was not until 1593 with the outbreak of war with the Ottoman Empire which lasted until 1606, the so-called "Long War".

This is not to say that there were not religious tensions within the Empire, especially in Austria where Emperor Rudolf II tried to impose the Counter-Reformation more aggressively, which resulted in open revolt at the turn of the seventeenth century. His Protestant subjects in Bohemia were also demanding greater religious freedom, and in 1609 Rudolf was forced to grant a "Letter of Majesty". Rudolf's brother, Matthias, had sided with the rebels and on 11 March 1611 Rudolf was forced to abdicate as King of Bohemia in favour of his brother. Rudolf was also stripped of all his other titles, except that of Emperor of the Holy Roman Empire. He died on 20 January 1612 and was succeeded by Matthias. However, if the Protestants of Bohemia believed they would be able to enjoy the religious freedom they had been promised they were sadly mistaken: Matthias immediately began to undermine the Letter of Majesty by appointing Catholics to all important positions. By now Matthias was 55 and childless, so he appointed Archduke Ferdinand as his successor, who was crowned King of Bohemia in 1617. Ferdinand was even more of a fanatical Catholic than either Rudolf or Matthias, and soon began to impose his will on the Bohemian nobility.

Meanwhile Ferdinand's cousin, Maximilian of Bavaria, was also trying to impose the Counter-Reformation in the Germanic states, annexing

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[1] Geoff Mortimer, *The Origins of the Thirty Years War and the Revolt in Bohemia, 1618* (Basingstoke: Palgrave Macmillan, 2015), pp.190–191.

[2] Father Henry Fitzsimon, 'Diary of the Bohemian War of 1620', in *Words of Comfort to persecuted Catholics* (Dublin; Gill & Son, 1881) p.83; Andreas Kraus, *Geschichte Bayerns: von den Anfängen bis zur Gegenwart* (München: C.H. Beck, 1983), pp.227–228, 253.

Donauwörth in December 1607 after a religious dispute resulted in it receiving an Imperial ban. In 1608 some of the Protestant states formed the Protestant Union for their mutual protection, although apart from the Palatinate its membership only included a few states and the Lutheran John George, Elector of Saxony, would have nothing to do with it. In response the Catholic League was formed the following year, although like its counterpart only a few states joined. Neither were the Catholics united: some backed the Emperor, fearing that Maximilian of Bavaria was becoming too powerful, whilst others did not want the Emperor interfering in the running of their states.

With tensions still running high over Bavaria's annexation of Donauwörth, in 1609 a new crisis arose over who would succeed the ruler of the Duchy of Cleves–Jülich. Both sides began to arm and there were a few clashes, but after the assassination of King Henry IV of France, who had supported the Protestants' claim, neither side was willing to be involved in a full-scale war; therefore the "Cleves–Jülich Affair" was settled diplomatically and with the conversion of one of the claimants to Catholicism. Therefore, in 1614 with the "affair" over, the Empire once more settled down into a state of peace.

However, each of the Germanic states not only practised their own religion but also from 1582 the Catholic states introduced the Gregorian calendar, which celebrated the new year on 1 January; it was 10 days in front of the Julian calendar which the Protestant states still adhered to. Moreover, under the Julian calendar New Year's Day was celebrated on 25 March. It would not be until 1700 that all Germanic states followed the Gregorian calendar. There were also different currencies within the Empire, although most states recognised the gulden, which which had its origins in the old florin and was often abbreviated to "fl" in documents; there were 60 kreuzers in a gulden. Then there was the thaler (sometimes referred to as a Reichthaler) and the rixdaler which was worth 90 kreuzers.

Emperors did not have a standing army so they relied on the rulers of the various German states to supply men for the Empire's defence. Therefore with the outbreak of the Bohemian Revolt Ferdinand needed an army to crush the rebellion, but it was not until 8 October 1619 that he signed the "Munich Agreement" with Maximilian, whereby it was agreed that Bavaria would raise an army of 18,000 infantry and 2,600 horse. In return Maximilian was to have overall command of the army, although he left this to his able general, Johann von Tilly. In return Ferdinand agreed to finance the army, although until Maximilian received payment he could hold any land he recaptured. Since Ferdinand was as extravagant as Maximilian was spendthrift it was likely that this land would remain in Bavarian hands for years to come. Furthermore if Bavaria did lose any land then the Emperor would compensate Maximilian with part of the Habsburg lands. Spain also agreed to subsidise 1,000 horse.[3]

The Catholic League's army was composed mainly of Bavarian regiments which would invade Bohemia, while a Spanish army was sent from the

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[3] 'Munchener Vertrag zwischen Maximilian und Kaiser Ferdinand II vom 8 Oktober 1619' in *Die Politik Maximilians I von Bayern und Seiner Verbündeten 1618–1651*, part I , vol. 1, Jan 1618–Dec 1620 (München: R. Oldenbourg, 1966), ed. Karl Mayr-Deisinger and George Franz, p.239.

Netherlands to quell the Palatinate. Ferdinand needed a quick war because Spain was preparing for the end of the Twelve Years' Truce in 1621 with the Dutch. Meanwhile an army led by the Lutheran Elector John George of Saxony would invade Lusatia and Silesia, on the understanding that Saxony could annex Lusatia.

However, the battle of White Mountain, fought on 8 November 1620, did not end the war because Frederick, who had been stripped of his hereditary lands, would try to regain them with the support Count Ernest von Mansfeld's and Gabriel Bethlen's armies. The Bavarian Army replaced the Spanish troops in the Palatinate and Ferdinand gave the Upper Palatinate to Maximilian, who also held Upper Austria as gratuity until the Emperor could afford to reclaim it financially. In fact it was not until 1628 that Ferdinand regained Upper Austria, while Maximilian sent Jesuits into his new province to convert the population to Catholicism.

Meanwhile the conflict continued. In 1625 Christian IV, who was the Duke of Holstein as well as the King of Denmark, entered the war, followed by Sweden under Gustavus Adolphus in 1630. Finally in 1635 Catholic France entered the fray on the Protestants' side and much of Germany would be plunged into war. Despite these foreign interventions it was the deposing of Frederick from the Palatinate that would be a running sore during the war. Although Frederick died in 1632, his children – Princes Charles Louis, Rupert and Maurice – would continue the fight, which on 28 May 1638 prompted the Venetian Ambassador to England, Francesco Zonca, to write to the Doge and Senate, "the elector of Mayence has written to the Emperor that if no means is found of arranging the differences between the Bavarian and Palatinate houses they can never hope for peace in Germany".[4]

All this time Bavarian forces continued to fight until, exhausted by constant war, Maximilian made peace in 1647. However, this peace was short-lived and fighting broke out again the following year. Bavaria's army was disbanded in 1649.

It is often said that until Wallenstein offered to raise an army for the Emperor in 1625, Ferdinand could rely only on the army of the Catholic League. However, this is not so: Ferdinand had raised his own army in 1619, first under the command of General Charles Bonaventure de Longueville, Count Bucquoy, who commanded it at the battle of White Mountain but drowned in 1621. Following Bucquoy's death the command passed to Hieronymus Caraffa, the Marquis of Montenegro. Caraffa had joined the Spanish Army in 1587 aged 23, fighting in the Dutch Revolt and the Franco-Spanish War of 1595–1598. In 1620 he entered Imperial service and prevented Gabriel Bethlen (in Hungarian, Bethlen Gábor) from joining the Bohemian Army before the battle of White Mountain. Caraffa and his army have been largely forgotten because his regiments were stationed mainly in Hungary and Moravia to guard against an attack from Bethlen, while other regiments were scattered throughout the Empire. However, in December

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[4] Francesco Zonca to Doge and Senate, 28 May 1638, in Alan Hinds (ed.), *Calendar of State Papers Relating To English Affairs in the Archives and Collections of Venice*, vol. 24, 1636–1639 (London: HMSO, 1923), p.417.

1623 Caraffa's army was defeated by Bethlen, who, it was said, had killed "all the Italians, Spanish and Walloons", only showing mercy to the Germans within the army. Caraffa was also captured along with most of his officers.[5]

This defeat forced Ferdinand to make peace with Bethlen in 1624, and following his release Caraffa returned to Spain, being appointed viceroy and captain general of Aragon. In 1633 he was recalled to the Netherlands, but he fell ill and died on the journey. At the beginning of 1624 Caraffa's Imperialist army composed nine regiments of horse and 11 regiments of foot, or about the size of the League's army, which in February 1623 mustered 14 regiments of foot and six regiments of horse. However, according to Tilly at this time his infantry mustered only about 15,000 men and 3,000–3,500 cavalry.[6]

When Caraffa retired from the Imperialist service this gave Wallenstein, who was already a senior commander within Ferdinand's army, the opportunity to offer to raise new regiments for the Emperor. On 7 April 1625 Wallenstein was appointed commander-in-chief of "all his [the emperor's] troops currently in the Holy Roman Empire and the Netherlands, as well as those that may be sent to him". Wallenstein promised to raise 50,000 men, although this was initially reduced to 20,000 men. Wallenstein also chose to offer his assistance to Ferdinand at the right time, because the Emperor needed a larger army since the war was spreading within the Empire. Early in 1625 Christian IV entered the war on Frederick's side. Although 1625–1629 would be known as the "Danish period" of the war, it was as the Duke of Holstein rather than the King of Denmark that Christian initially entered the fray; even so he could still command great resources in his war effort.[7]

Unfortunately for Ferdinand's cause Maximilian was hostile to Wallenstein, and on 9 July 1628 it was reported that "The Duke of Bavaria hath sent word to Tilly [that] he should have nothing to do with General Wallenstein", because he was quartering some troops in the neighbourhood of Bavaria. Another letter dated 12 August 1628 from Hamburg also shows that tension was growing between Tilly and Wallenstein: when Wallenstein was forced to retire from the siege of Stralsund, "betwixt them is an immortal malice and jealousy and I am confident that Tilly is much comforted in Wallenstein's disaster". When Bavaria was occupied by the Swedish in 1632 Wallenstein was said to have refused to come to Maximilian's assistance.[8]

It was only with the assassination of Wallenstein in 1634 at Eger, and the Peace of Prague in 1635, that Ferdinand was able to put his war effort in order. He needed a larger army because he needed to control larger and larger areas of his Empire; the size of the Imperialist army steadily increased, having a staggering 101 regiments of horse and 47 regiments of foot in 1636, although this had fallen to 46 and 40 regiments respectively in 1648. These figures do not include the armies of Bavaria and Saxony, and the armies of the Protestant princes who had made their peace with the Emperor, which officially came under his command from 1635 although they remained separate.[9]

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[5] The National Archives (TNA), SP 101/46 f.205, *News from the Hague*, 14 December 1623.

[6] Alphons von Wrede, *Geschichte der k. und k. Wehrmacht: die Regimenter, Corps, Branchen und Anstalten von 1618 bis Ende des XIX. Jahrhunderts* (Vienna: L.W. Seidel and Son, 1898–1905), vol. 2, part 1, p.87. In 1620 the Imperialist Army had 18 regiments of horse and 14 regiments of foot and increased the following years to 25 and 22 regiments respectively, although several regiments were disbanded in the next two years.

[7] Peter Wilson, *The Thirty Years War, A Sourcebook* (Basingstoke: Palgrave Macmillan, 2010), p.103; Wrede, *Geschichte der k. und k. Wehrmacht*, vol. 2, pp.12, 96.

[8] TNA, SP 101/29, ff.115, 151; SP81/13.

Bavaria could not afford to raise such a large army since it only received a fraction of the subsidies that the Emperor or other nations had, but it only needed to protect Maximilian's interests. He once wrote to General Franz Mercy that "what we lack in quantity must be made up in quality". This was fine while his army was successful, but if it were defeated then Maximilian could not easily afford to replace it, so there was a tendency to avoid battles unless victory was certain. However, on 3 August 1645 Mercy misjudged the situation and was killed at the battle of Allerheim. As well as the loss of its commander the Bavarian Army is said to have lost 2,500 killed and wounded and about 1,500 captured, including six colonels and many colours, from a total force of 15,000–16,000 men. The French force under the Duc d'Enghien, who was also known as "the Great Condé", was said to have been 17,000 strong. It was only with the Peace of Westphalia in October 1648 that Bavaria could begin its recovery from thirty years of war, and even then that would take decades rather than years.[10]

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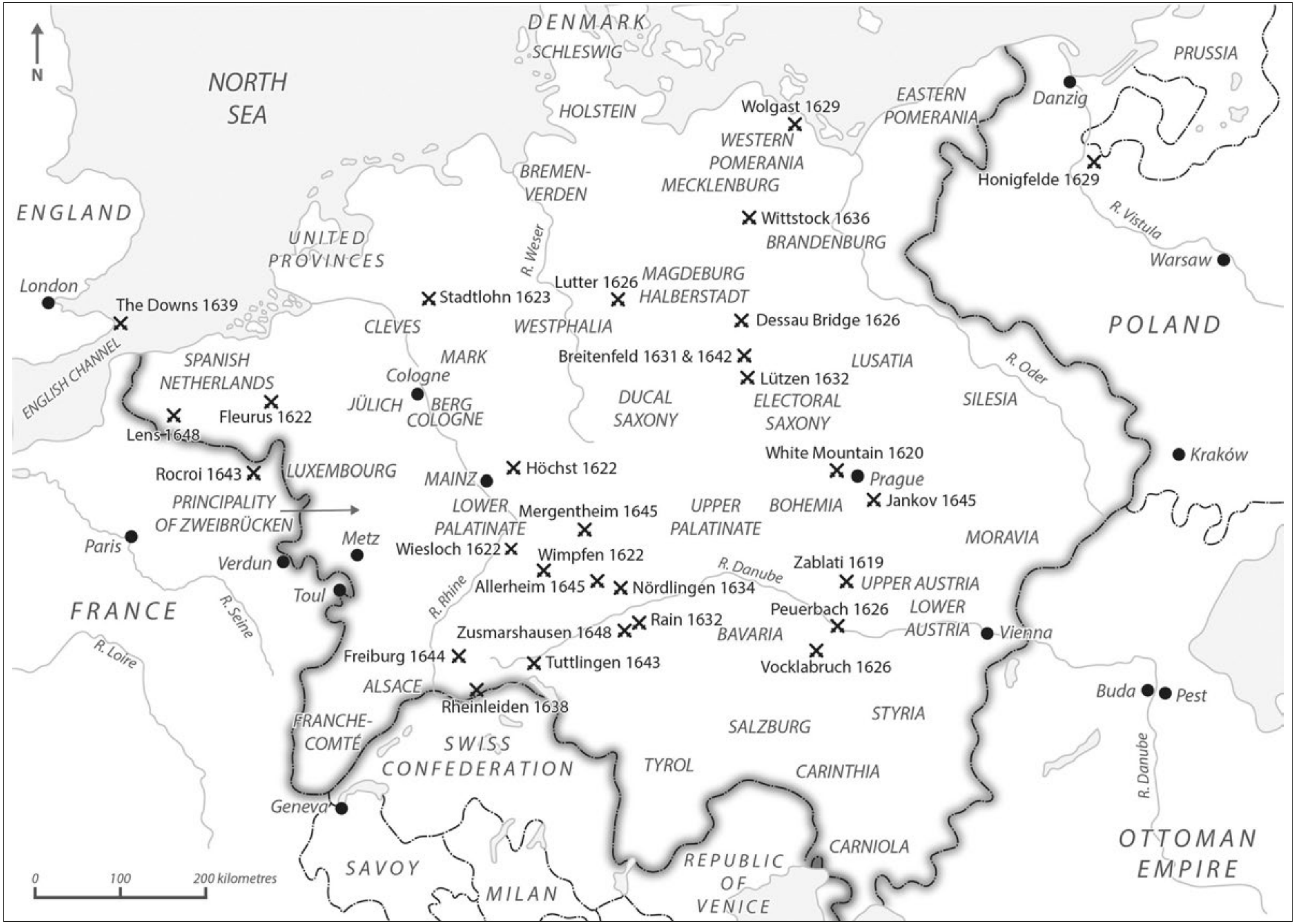
[9] Wrede, *Geschichte der k. und k. Wehrmacht*, vol. 2, pp.12, 96.

[10] Derek Croxton, *Peacemaking in the Early Modern Europe, Cardinal Mazarin and the Congress of Westphalia, 1643–1648* (Selinsgrove, NJ: Susquehanna University Press, 1999), p.88.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PRUSSIA
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Wolgast 1629
WESTERN POMERANIA
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Honigfelde 1629
R. Vistula
BREMEN-VERDEN
ENGLAND
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Wittstock 1636
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Warsaw
R. Weser
London
The Downs 1639
Stadtlohn 1623
Lutter 1626
MAGDEBURG
HALBERSTADT
Dessau Bridge 1626
POLAND
CLEVES
WESTPHALIA
ENGLISH CHANNEL
SPANISH NETHERLANDS
MARK
Breitenfeld 1631 & 1642
LUSATIA
R. Oder
Cologne
Lützen 1632
Fleurus 1622
JÜLICH
BERG
COLOGNE
DUCAL SAXONY
ELECTORAL SAXONY
SILESIA
Lens 1648
White Mountain 1620
Rocroi 1643
LUXEMBOURG
MAINZ
Höchst 1622
Prague
Kraków
PRINCIPALITY OF ZWEIBRÜCKEN
LOWER PALATINATE
Mergentheim 1645
UPPER PALATINATE
BOHEMIA
Jankov 1645
Metz
MORAVIA
Paris
Wiesloch 1622
Wimpfen 1622
Zablati 1619
Verdun
R. Danube
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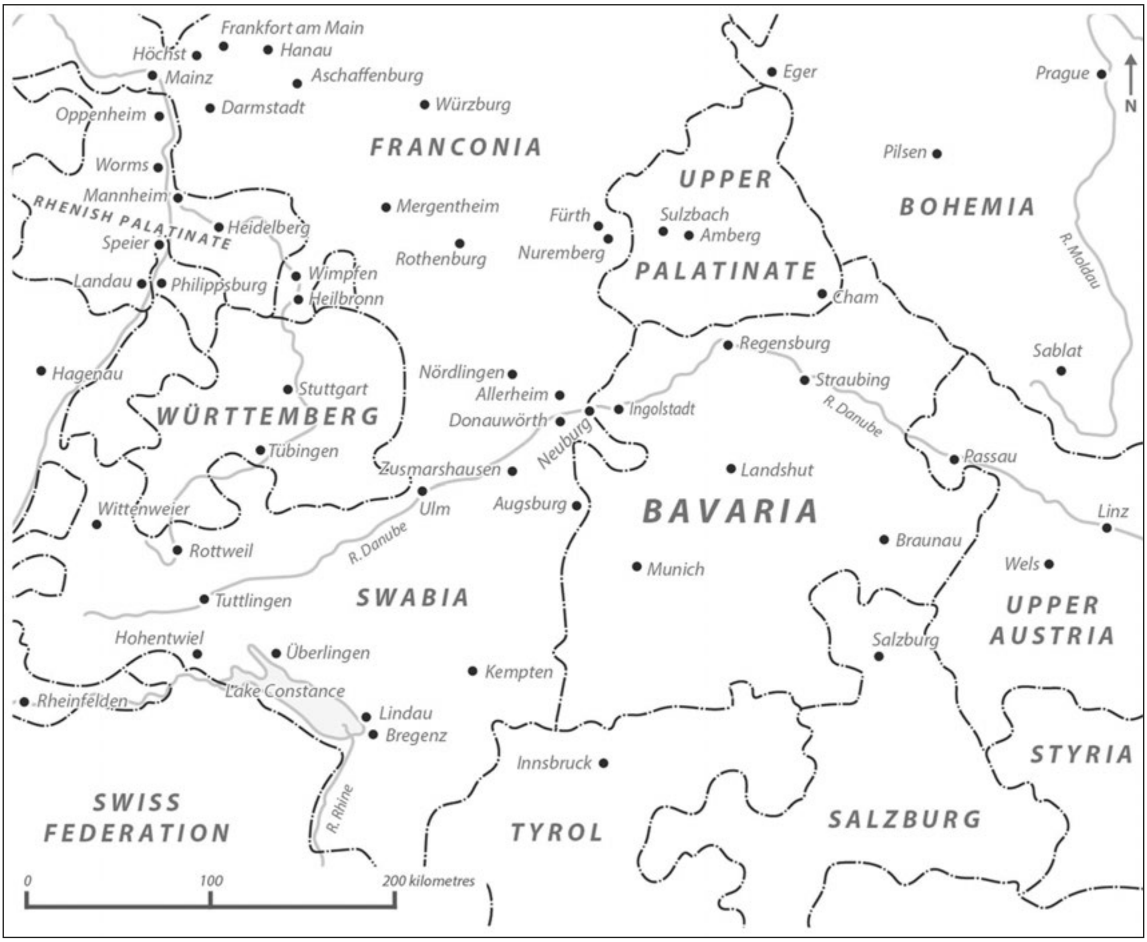
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Above: Bavaria and its neighbours during the Thirty Years' War.

Left: Central Europe during the Thirty Years' War

1

The Officer Corps

When Maximilian agreed to raise an army of 30,000 men on 8 October 1619 commissions were sent out to the nobility and the gentry notifying them as to what position they were to hold and how many men they were expected to raise, and the number of companies or troops that would make up the regiment. However, what little experience the force had of military affairs, if any, had been gained in war with the Ottoman Empire and the Cleves–Jülich Affair or by the various civic guards or local militias which were called out in emergencies during periods of unrest. Once the colonels had been appointed then in theory they would send out commissions appointing men to command the various troops or companies within their regiments, although in practice a head of state might "suggest" an officer they could appoint to a position.[1]

When a colonelcy of a regiment did become vacant there was no guarantee that the lieutenant colonel would be chosen to command it: Lieutenant Colonel Hans Wolf von Salis petitioned Maximilian three times before he became a colonel. Maximilian's candidates were not always accepted by the regiment, however: when the colonelcy of the Würzburg Regiment of Foot became vacant in 1621 Maximilian appointed Count George Ernst von Hohenzollern-Sigmaringen as its colonel, but the regiment mutinied because they wanted Wolf Dietrich Truchsess von Wetzhausen, their lieutenant colonel. Both the officers and the men petitioned the Bishop of Würzburg, who had raised the regiment, and when he sided with them Maximilian was forced to back down and give Count George Ernst a commission to raise a new regiment instead. However, this was not the end of the matter and Maximilian seems to have held a grudge against the regiment since it was almost always the last to be paid.[2]

It has been estimated that a colonel needed between 400,000 and 450,000 fl per year to maintain a regiment of foot 3,000 strong, and 260,000 to 300,000 fl for a regiment of 1,200 cavalry. Fortunately for the colonels very few regiments mustered this strength so the outlay was much smaller, with a regiment of horse rarely mustering more than 500 strong, particularly during the latter part of the war. Nevertheless, when Otto Heinrich Fugger raised a regiment for the Spanish service at the beginning of the war it cost him 50,000 gulders. Despite coming from a wealthy Augsburg banking family, he had to borrow much of the money from his family and by obtaining loans between 1,000 to 15,000 guilders at five to six percent interest per annum. He was still paying back the money for his regiment when he died in 1644. When he entered Bavarian service in 1631 he commanded another regiment as well as taking over Johann von Tilly's Regiment of Foot on 30 December 1632. He would still have had to pay for the upkeep of these regiments until he was reimbursed by Maximilian, although this might be some time coming.

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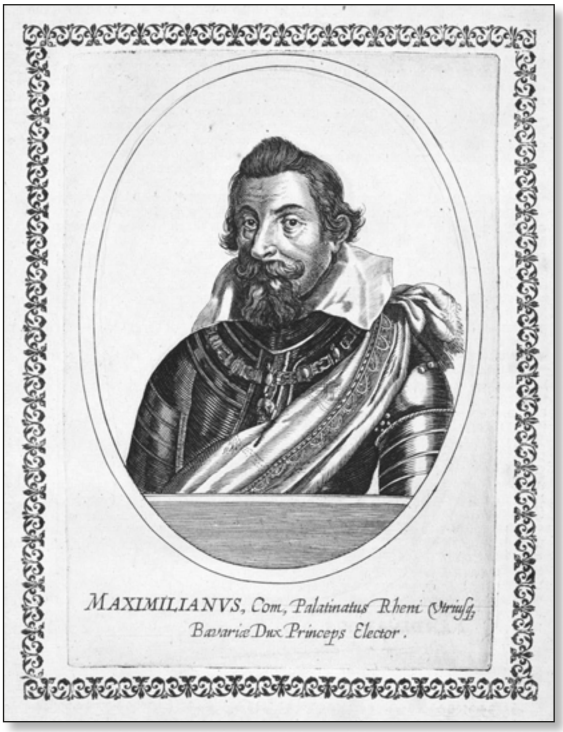
[1] Arno Duch, *Die Politik Maximilian I von Bayern und seiner verbunden, 1618–1651* (Munich: R. Oldenbourg, 1970), vol. I, part II, pp.75–76.

[2] Fritz Redlich, *The Germany Military Enterpriser and his Work force,* (Wiesbaden: Franz Steiner, 1964) vol. 2, p.431.


MAXIMILIANVS, Com, Palatinatus Rheni Vtriusq,
Bavariæ Dux Princeps Elector.

Maximilian I of Bavaria. Matthäus Merian der Ältere.

The nobility were expected to serve in the army when called upon, which was fine if they were cut out for a military life; however some were not, such as the Imperialist General Federico Savelli, who was forced into soldiering by his father, Duke Bernard de Savelli. True, Federico had served in the Long War and had been the commander of the Papal forces, but in February 1631 when he surrendered Demmin to Gustavus Adolphus after a brief siege, Gustavus advised him to serve the Emperor at court rather than in the army. Nevertheless, Savelli went on to serve at the siege of Magdeburg and battle of Breitenfeld, after which Ferdinand sent him to assist Pope Urban VIII. Despite never being happy when he was soldiering , Savelli returned to army life in 1635 and became a field marshal in 1638. Whether he was trying to prove himself, or his military rank compelled him to do so, he insisted on commanding the advance guard of the Imperialist Army himself and blundered into a narrow pass at Wittenweier, where he was defeated by Bernard von Saxe-Weimar on 30 July 1638. According to Franz Redlich Savelli was to be court-martialled for this, but his aristocratic status prevented it and instead he returned to the diplomatic life.[3]

One person better suited to army life was Johann von Tilly. Born in South Brabant in 1559 of a noble family he served with the Spanish Army under the Duke of Alva in 1580, before entering Imperial service in 1598. After the peace with the Ottoman Empire he entered Bavarian service, commanding the state's militia. So by the time of the outbreak of the Thirty Years' War he had considerable experience in warfare and Maximilian appointed him commander of his army.

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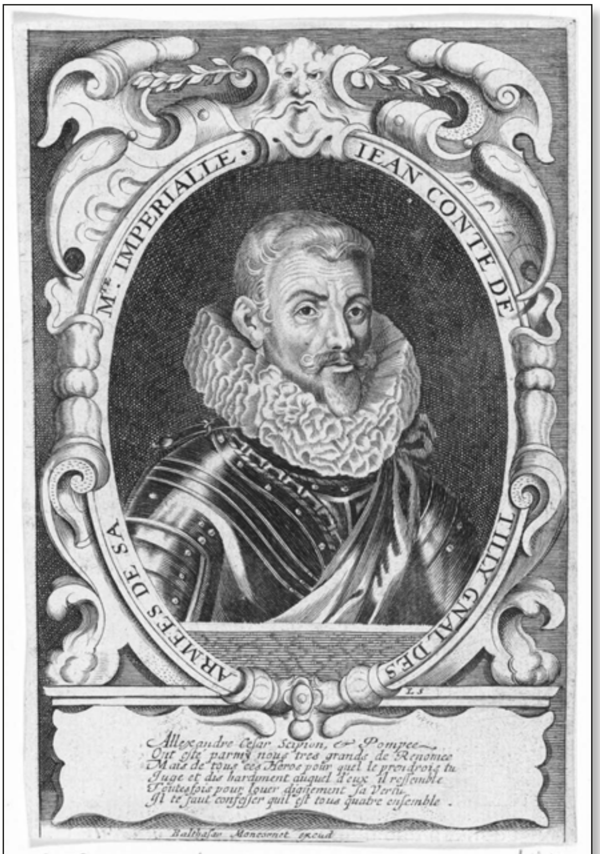
[3] Sommeregger 'Savelli, Duke Friedrich von', in *General German Biography 53* (1907), pp.720–721 <http://www.deutsche-biographie.de/pnd115775617.html?anchor=adb> (accessed November 2015); Redlich, vol. 2, p.385.


IEAN CONTE DE TILLY GNAL DES ARMEES DE SA Mte. IMPERIALLE
L S
Allexandre Cesar Scipion, & Pompee
Ont esté parmy nous tres grands de Renomee
Mais de tous ces Heros pour quel le prendrois tu
Juge et dis hardiment auquel d'eux il ressemble
Toutesfois pour louer dignement sa Vertu
Il te faut confesser quil est tous quatre ensemble .
Balthasar Moncornet excud

Johann Tserclaes, Count von Tilly. Portrait by Louis Spirinx. (Rijksmuseum)

Unfortunately he is best remembered for the sack of Magdeburg and his defeat at the battle of Breitenfeld in 1631, but he was one of the best generals of the Thirty Years' War, although he has been overshadowed by Gustavus Adolphus and Wallenstein. It was said that a fog had come down during the battle of the Lech that obscured the Swedish movements, which prompted Tilly to have confessed to the Duke of Bavaria that "he had no good opinion of his actions, seeing daily heaven and earth did favour and second the King of Sweden".[4]

Despite being 72 by this time he was wounded at Breitenfeld, and mortally wounded at the crossing of the River Lech, which opened Bavaria to invasion by the Swedish. A Scottish officer, Robert Monro, admired Tilly. He records, "Wherein we have a notable example of an old expert General, who being seventy two years of age, was ready to die in defence of his Religion and Country, and in defence of those whom he served … [which] should encourage all brave Cavaliers … to follow his example in life and death."[5]

After Tilly's death Maximilian appointed Lord Grants to succeed him, but he was described as not being "beloved nor respected" by his men and so he seems to have been sidelined and the rank Tilly held appears to have remained vacant. Whether appointed by patronage or merit it was important that an officer had the respect of his fellow officers, because as Robert Monro points out, "When officers and soldiers conceive an evil opinion of their leaders, no eloquence is able to make them think well of them thereafter … [and they] are despised by their followers."[6]

Monro also admired General Gottfried von Pappenheim, whom he describes as "a worthy brave fellow, thou he was our enemy his valour and resolution I esteemed so much". He adds that if an enemy army was near him they could "never suffered to sleep sound" for fear he would attack them.[7]

Pappenheim was born on 29 May 1594 in Treuchtlingen, Bavaria. His father died when he was only six and his mother married Baron Adam von Herbersdorf. In 1616 Pappenheim converted to Catholicism and when the war broke out his status and the patronage of his stepfather guaranteed him a high position within the army, even though he did not have any

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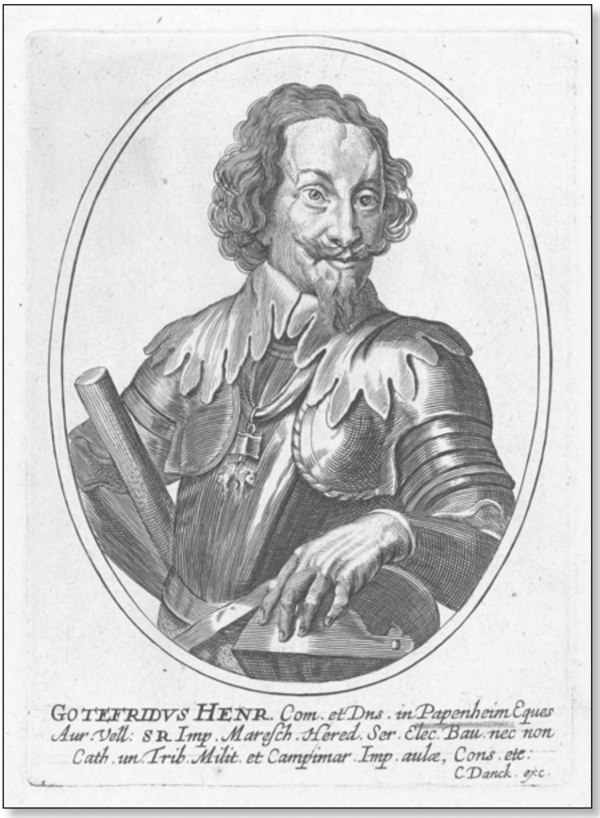
[4] TNA, SP 101/30, Newsletters, foreign Germany, 1632–1634, f.172.

[5] Robert Monro, *His Expedition with the Worthy Scots Regiment (Called Mac-Keyes Regiment) levied in August 1626* (London: William Jones, 1637), part II, p.118.

[6] Monro, part II, p.174.

[7] Monro, part II, pp.136, 142.


GOTEFRIDVS HENR. Com. et Dns. in Papenheim Eques
Aur. Vell: S R Imp. Mareſch. Hered. Ser. Elec. Bau. nec non
Cath. un. Trib. Milit. et Campimar. Imp. aulæ, Cons. etc:
C Danck. exc.

Gottfried Heinrich zu Pappenheim. Portrait by Cornelis Danckerts (I). (Rijksmuseum)

military experience. At first he was a captain in Herbersdorf's Regiment of Cuirassiers, becoming the regiment's lieutenant colonel by October 1621. In April 1622 he had become a colonel, and although two years later he entered Spanish service, he was recalled in 1626 to help Maximilian put down the rebellion in Upper Austria. In November 1630 he rose to the rank of field marshal of the Catholic League, although he seems to have fallen out with Tilly during the siege of Magdeburg and so transferred to Imperialist service without too much difficulty, no doubt much to the sorrow of Maximilian and Tilly at the loss of a good general. Pappenheim was killed at the battle of Lützen on 16 November 1632.

Gottfried von Pappenheim left only one son, Wolfgang Adam von Pappenheim, who was born in 1618. Despite his age, the status of his family was such that he succeeded his father as the colonel of his regiment of foot in 1632. However, the regiment would be commanded by its lieutenant colonel, Hans Ulrich Gold, until Wolfgang was old enough to command it in person. This brought about several demands to Maximilian from Wolfgang over the years, who was eager to take command of his regiment. While under his command, however, it lost 400 men in two weeks at the siege of Hohenasperg, trying to storm the town; Wolfgang was killed in a duel with Colonel Colloredo in Prague on 30 June 1647. Another Pappenheim to serve in the army was Phillipp Thomas Von Pappenheim, Gottfried's cousin, although he appears to have only risen to the rank of captain and became the governor of Waldsassen in the Upper Palatinate. However, there is a set of regimental colours attributed to him.[8]

The highest rank within the Bavarian Army was field marshal, which would be held by six men during the war, including Johann Jakob Count von Anholt. In 1620 Anholt was appointed colonel, then major general of foot and then major general. Two years later he was appointed field marshal, second only to Maximilian and Tilly in command of the Bavarian Army. Other field marshals included Joachim von Wahl, who had been a captain in 1620 and by 1626 had become the lieutenant colonel of Tilly's own regiment of foot. He became field marshal on 29 May 1640, however in 1644 due to ill health he was appointed the governor of Ingolstadt so that he could still enjoy his status as an officer. He was succeeded by Franz Freiherr von Mercy,

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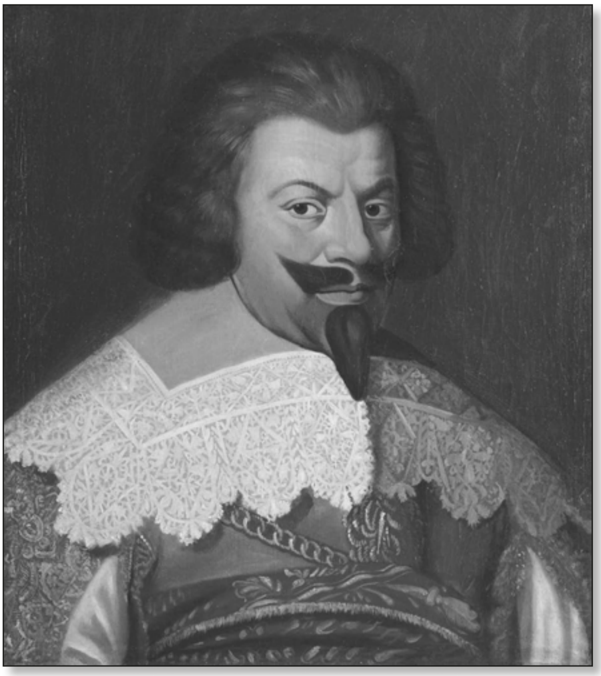
[8] Biography of Wolfgang Adam von Pappenheim, from <www.30jaehrigerkreig.de> (accessed October 2015).



Johann von Werth. Painter unknown, after Pieter de Jode I. (Château de Bussy-Rabutin collection. Reproduced under open license. Photograph Benjamin Gavaudo / Centre des monuments nationaux)

who was killed at the battle of Allerheim on 3 August 1645.[9]

Of course not all officers reached the heights of field marshal. There would be 11 generals of cavalry or generals of the ordnance, five lieutenant field marshals and 21 major generals. True, the higher up the social ladder a person was the higher command he was initially appointed to, but this is not to say that all the officers came from the nobility. Between 1635 and 1649 the army consisted of 13 regiments of foot, 16 of horse and two of dragoons commanded by 51 colonels, but of these only 16 came from the nobility, the rest being from gentry or peasant families. However, of the army's generals 18 out of 22 were from the nobility. On the other hand, in the Imperialist Army in 1633 only 13 out of 107 colonels were commoners, although this number was slowly rising as the war progressed.[10]

Among those officers who came from a peasant family was Johann von Werth, who was born in 1594 and enlisted as a trooper in the Spanish service in the Netherlands. In 1631 he transferred to the Catholic League as the major of Colonel Eynatten's Regiment of Horse and in December 1632 took over the regiment. In 1636 he led an invasion of France, but was captured two years later at the battle of Rheinfelden. It was not until 1642 that he was finally exchanged. However, despite being a renowned light cavalry commander, after his release he was bypassed for promotion twice and so in 1647 joined the Imperialist Army.

Johann von Sporck was also born a peasant and he enlisted in the Bavarian Army in 1619 aged about 18. However, by 1631 he had risen to the rank of cornet in Bonnighausen's Regiment and two years later was a captain. In 1636 he was recorded as the *Obristwachtmeister* or major of De Maestro's Regiment of Horse. He later re-entered Bavarian service and rose to the rank of colonel. In 1647 both Sporck and Werth once more swore allegiance to the Emperor, after Bavaria had made peace. They tried, and failed, to take a large part of the Bavarian Army with them and so were branded traitors and a reward of 10,000 thalers was placed on Werth's head, with lesser sums being offered for colonels Holtz and Creuz who were also incriminated in the plot. Although they lost their Bavarian estates, they were rewarded by Ferdinand III and Sporck became a baron and received compensation for his losses. After the Peace of Westphalia he continued to serve with the Imperialist Army against the Poles and then the Turks, finally retiring from army life in 1675. By the time of his death in 1679 this lowly

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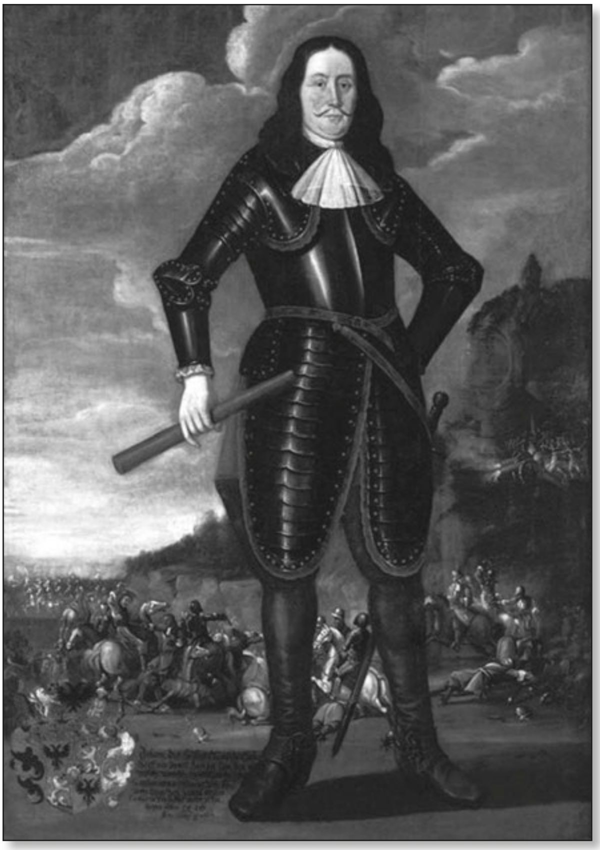
[9] Redlich, p.198; Johann Heilmann, *Kreigsgeschichte von Bayern, Franken, Pfalz und Schwaben von 1506–1651* (München: I.G. Cotta'schen, 1868), vol. 2, pp.1110–1111.

[10] Andreas Kraus, *Maximilian I: Bayerns Grosser Kurfurst* (Graz: Styria, 1990), p.152; Redlich, p.418.



Johann von Sporck. Painter unknown.

peasant had become a count and a general and was one of the richest landowners in Bohemia with a fortune of three million florins. Sporck married three times, on the last two occasions to countesses, a far cry from his humble roots.[11]

Another officer said to be a bricklayer before joining the army was Gil De Haes. It is said that he came from the Netherlands and was a Jewish convert to Catholicism. By 1632 he was a colonel in the Imperialist Army and became a major general in the Bavarian Army in 1642. In July 1646 his regiment passed to Colonel Johann Elter. Gil De Haes later served with the Venetian Army and died in 1657 in Croatia.[12]

When he was about 19 years old Augustin von Fritsch enlisted in Colonel Schmidt's regiment of foot as a musketeer in time to fight at the battle of White Mountain. After 11 years service, he advanced in rank on average every three years until he became a colonel. In 1649 he was discharged from the army when his regiment was disbanded.

The officer corps was a mixed bag of nationalities. In September 1645 a troop in Gil de Haes' Regiment of Horse was commanded by a captain from Lucerne, while its lieutenant was from Livonia and the cornet was from Naples, the sergeant was from Strasbourg, the *führer*, or leader, was from Zurich and the farrier was from Basel. Its corporals were from Lübeck, Württemberg, Candia, Ueberlingen, Holland and Mantua. It also had two reformado lieutenants from Franconia and Silesia and two cornets from Poland and Styria.[13]

Having 'foreign' officers within a regiment was not unique to the Bavarian Army: the Dutch and Swedish Armies had many Scottish, English and German officers, while in the Danish Army a list drawn up in June 1627 of 19 cavalry and 30 infantry companies reveals that about a third were commanded by Bohemians, Moravians and Silesians. The Dutch even divided their army into brigades of French, English and Scottish Regiments.[14]

However, with the origins of most of the officers being unknown it would be a mistake to suggest that the officer corps of the Bavarian Army, or any other army in fact, was made up of foreign officers or peasantry who had risen through the ranks, although no doubt the longevity of the war helped.

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[11] Redlich, pp.191–192; biography of Johan von Sporck from <www.30jaehrigerkreig.de> (accessed October 2015).

[12] TNA SP 101/3, Newsletters, foreign, Flanders, 1638–1667 unfolio.

[13] <www.30jaehrigerkreig.de> (accessed October 2015).

[14] J.V. Polisensky.,*War and Society in Europe, 1618–1648* (London: Cambridge University Press, 1978), p.117.

Moreover despite being the same rank, those from the nobility would enjoy a higher social status than the gentry or those who had risen from the ranks.

Of course many soldiers were not promoted, and if they were they only reached the rank of corporal or sergeant, and were known as lesser officers. Among them was Peter Hagendorf who enlisted in Pappenheim's Regiment of Foot on 3 April 1627 at Ulm.

Unfortunately, 13 pages at the front of Hagendorf's diary are missing so we do not know why he chose a military career. What we do know is that at the baptism of his daughter, Elizabeth, he is described as a "soldier from Zerbst", which is in the state of Anhalt, near to Magdeburg which Hagendorf would describe as a "beautiful city … and my fatherland." He also appears to have been a Lutheran and had an education, since he was literate. In 1623 he set off to join the Venetian Army, though why he chose this army is not known. In 1625 he was discharged, but re-enlisted again in an unspecified army and served for about 18 months before being once again discharged. It was while returning from Italy "having become completely down and out", that he enlisted in the Bavarian Army and was appointed a lance pasadore, which would later become the rank of lance corporal. Early in 1632 he was promoted to corporal and then in 1633 he was acting sergeant when he was captured by the Swedish Army at Straubing on the River Danube. His captors respected his rank and appointed him a sergeant in the Red Regiment. In his memoirs he appears to have willingly been part of the Swedish Army whilst his old captain seems to have been quickly exchanged and returned to the Bavarian Army. However, Hagendorf was captured again at the battle of Nördlingen in 1634 and was allowed to return to his old regiment, as were all the other former Bavarian and Imperialist soldiers. Unfortunately, for Hagendorf this meant becoming a corporal once more.[15]

Military careers did not necessarily end with the Peace of Westphalia. Being born on 10 August 1612 Franz Graf von Fugger was about 15 years old when he became the major of Schmidt's Regiment in 1627. In 1643 he was promoted lieutenant colonel of Holtz's Regiment and then colonel. However when his regiment was disbanded in 1649 he continued in military service, becoming a major general of infantry and artillery in 1663 and commanding a regiment of foot in the Hungarian campaign. He was killed on 1 August 1664 at the battle of St Gotthard against the Turks, and was buried in Ingolstadt aged 51.

However, he was not the last officer who had served in the Bavarian Army during the Thirty Years' War, who continued to serve after the war had ended. This honour appears to go to Ferdinand von Puech, who in 1631 was an ensign in Johann von Tilly's Regiment. Ten years later he was the lieutenant colonel of Haslang's Regiment of Foot and on 16 September 1644 he became its colonel. In 1657 he was again commissioned as a colonel of a regiment of foot in the Bavarian Army and in 1678 became a lieutenant field marshal, and it was not until 1685 that he resigned his commissions.

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[15] Hagendorf's account printed in *The Thirty Years War, A Documentary History*, edited and translated by Tryntje Helfferich (Indianapolis: Hackett Publishing Company, 2009) p.280. Helfferich states that Hagendorf was a private but the original account edited by Jan Peters says lance corporal, p.62.

Pappenheim, Johann von Werth and Johann von Sporck were converts to Catholicism, but despite Maximilian being an advocate of the Counter-Reformation, not all his officers were Catholic. True, on 4 November 1629 he did order Tilly to expel all Protestant officers, but at one least continued to serve. He was Jurgen Ackermann, who had served under Count Ernst von Mansfeld and then in the Danish Service. In 1627, having received no pay and being forced to surrender to General Pappenheim at Wolfenbüttel, where his company was reduced to just 15 men, Ackermann's captain recommended him to his cousin Johann Reinhard von Stein Callenfels, who was a captain in Pappenheim's Regiment of Foot. "I was promoted so that I had command of a beautiful company of 300 men", he recalls. He was also appointed to be the regiment's quartermaster and continued to serve in the regiment at Magdeburg and the battle of Breitenfeld in 1631. Ackermann appears to have retired from the army shortly afterwards, using the money he had plundered during the war to buy some land. However, his former profession did not stop him being plundered by soldiers later in the war.[16]

It was an age when commanders were still expected to lead by example, and so there was always the danger of being killed in battle or dying on campaign. Tilly, Johan von Götz, Werth and Pappenheim were all wounded during the war and as already mentioned Tilly and Pappenheim would be killed in 1632. General of the Ordnance Fürstenberg died on 15 November 1627 and General of the Ordnance Otto von Schonberg and Major General Dietrich von Erwitte were killed at the battle of Breitenfeld in 1631, Major General Hans Schellhammer died at Speyer in 1635. Being a company commander could also be dangerous: Peter Hagendorf records that at the siege of Magdeburg his captain was shot dead by the garrison. On 22 March 1631 John Galgart "was brought in as our captain", but he was also shot dead on 28 April. He was succeeded by Tilge Neuberg on 6 May, but 10 days later he resigned his commission. On 26 May he was replaced by Johan Phillip Schultz. How long Captain Schultz lasted is not recorded but it is clear that in the space of two months Hagendorf's company had four different captains. Unfortunately, Hagendorf does not record the number of casualties his whole company suffered during this time; the toll must have been heavy, but death in battle or from disease opened the door for others to be promoted.[17]

An easier way to promotion was to join a newly raised army, so with the expansion of the Imperialist Army in 1625 many of the officers in the Catholic League resigned their commissions in order to seek advancement in rank. However, the exchange went both ways: when Franz de Mercy entered Maximilian's service he received 3,000 fl as a reward for leaving the service of Duke Charles of Lorraine.[18]

Likewise in 1628, dissatisfied with the speed of his promotion, Colonel Johann Philip Cratz's regiment in Imperial service was disbanded; two years later he petitioned for another commission, but before this was granted he joined the Bavarian service, and rose to the rank of general. However, in 1633 his plot to betray Ingolstadt to the Swedes was discovered and he fled to the Swedish service. At the battle of Nördlingen he was captured and beheaded the following year for treason.[19]

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[16] BHA File 236 f.39, Maximilian to Tilly, 4 November 1629; Robert Volkholtz *Juergen Ackermann, Kapitaen beim Regiment Alt Pappenheim, 1631* (Halberstadt: J Schimmellburg, 1895), p.13.

[17] Hagendorf's account in *The Thirty Years War, A Documentary History*, pp.282–283.

[18] Redlich, p.332.

Usually when a colonel transferred from one service to another he was expected to leave behind his regiment, and all the money he had invested in it. However, there are exceptions: in 1647 when Colonel Caspar Schoch entered Bavarian service he brought his regiment of dragoons with him. Schoch was another officer of lowly birth, being born on 25 November 1610 at Kleinholzleute, which belonged to the Isny Monastery. He became a groom and entered the army aged just 13 since he was good with horses, and slowly rose through the ranks. Meanwhile Hans Wolf von Salis appears to have swapped his regiment, which formerly belonged to Colonel Erwitte, with that of Colonel Eynatten's Regiment of Cuirassiers. In 1634 he again exchanged this regiment with Werth, for his regiment of foot.[20]

Of course being captured in battle could stifle an officer's prospects, especially if their imprisonment lasted a long time. Officers would remain prisoners until they were either swapped for an officer of similar rank or they paid a ransom, the price of a major general being 4,000 fl and a general 8,000 fl, while a colonel was worth about 1,000 thalers. However, in 1634 this was reduced to 600 florins for a cavalry colonel and 500 thalers for a colonel of a regiment of foot. Despite this reduction, when colonels Gayling and Hagenbach were captured in 1641 General Wahl petitioned Maximilian to act on their behalf since they lacked the means to pay their ransoms. Maximilian also paid the ransoms of several Bavarian colonels in the 1640s but deducted the amount from Gronsfeld's pay because he blamed him for being captured in the first place. Some officers were too valuable to release, and Werth would remain a prisoner for four years before being released, while the Swedish General Gustavus Horn was imprisoned for a staggering eight years.[21] Major generals Alexander von Haslang and Hans Wolf von Salis died as prisoners of war. When Haslang fell ill in 1620 and was being transported to Bavaria his small escort was ambushed by some enemy cavalry. Haslang was taken to Rakonitz where he died on 3 November. Salis died before he could be transported to Sweden, whether this was due to harsh treatment by the Swedes is not known. However, Salis' treatment is completely different to that received by the Bavarian Colonel von Gayling, who was allowed freedom of movement and actually persuaded Colonel Seckendorff of the Swedish Army to desert, though Seckendorff was captured and beheaded.

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[19] Redlich, p.193.

[20] Biography of Caspar Schoch from <www.30jaehrigerkreig.de> (accessed October 2015); Redlich, p.174.

[21] Redlich, pp.396–397. Werth was captured in 1638 at the battle of Rheinfelden, along with generals Savelli, Enkerfort and Sepreuter, four colonels, Neumeher, Götz, Henersheim and Wolfe, plus three lieutenant colonels and four majors, including Anthony de Werth, 31 captains, 22 lieutenants and 32 cornets; TNA SP 78/105.

2

The Rank and File

A warrant would be issued to an officer, which was known as the *Werbepatent* (levy patent) or *Werbekontrakt* (levy contract), stating where he was to recruit his company or troop and the number of men that he was expected to raise. This patent was to be shown to the authorities within the area as proof that he had been granted authority to raise the men.

In February 1623 it was reported that 20,000 men were being raised around Strasbourg and 10,000 in Lotheringia for Ferdinand, while Count von Fürstenberg was levying 18,000 men for the Duke of Bavaria. Some of these levies were destined to join Montenegro's army, since Gabriel Bethlen had once again declared war on Ferdinand and it was feared that he would join forces with the Marquis de Jagendorf and the Bohemian rebel Count Thurn. However, obtaining recruits was a constant problem, and at the end of November 1623 Ferdinand was again recruiting in Austria and Germany to reinforce his army, although the following January it was said that the recruits came in "slowly for want of money".[1]

On 30 April 1625 The Duke of Bavaria also complained of the "long delay" in providing men "for the security of the Empire which is threatened by so many foreign princes, particularly the king of Denmark and Sweden". This was the problem, that too many armies from various nations were being raised, so that a man wanting to join the army would choose whoever was offering the best terms. When Count von Fugger was raising his regiments he could afford to pay each recruit three thalers plus a shilling a day as soon as they accepted his service. On the other hand in Nuremberg the soldiers being recruited for the Emperor are said to have quickly deserted because they had not been paid. These were probably members of Colonel Hirchperger's Regiment, which is known to have been recruiting in the Nuremberg at this time, but without any assistance from the city's officials Hirchperger was unable to raise his regiment.[2]

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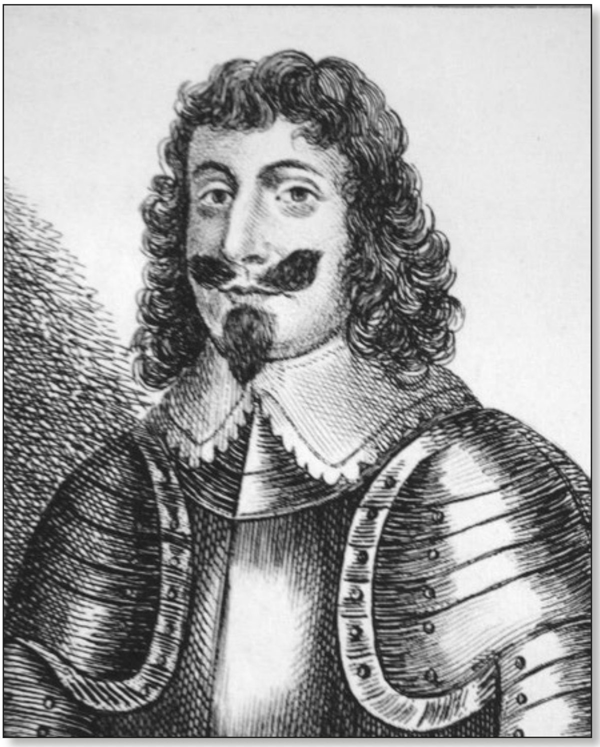
[1] *Weekly News*, 14 March 1623, no. 23, p.13; *News from Foreign Parts,* February 1623; TNA, SP 101/46, Newsletters foreign, Holland (United Provinces) 1623–1626, f.26; *News from the Hague*, 29 November to 6 December 1623.

[2] TNA, SP 101/42, Newsletters foreign, Germany, Austria, Bohemia and Hungary, 1620–1665, ff.169, 431; SP 101/28, Newsletters foreign, Germany,1620–1625, ff.9, 28; SP 101/46 Newsletters



Sydnam Poyntz.

Therefore when Wallenstein received his commission to increase the size of the Imperialist Army in November 1624 it was said that a "great provision of money and cloth is made for the paying of the soldiers", and in April 1625 Wallenstein had issued over 100 commissions to raise his army.[3]

At the beginning of Wallenstein's second generalship he again boasted that he would field an army of 80,000, but as a pamphlet recalled, "it is well known there is want of both men and money". However, on 29 February 1632 Anstruther wrote to Vane:

> The Duke of Friedland's [Wallenstein's] Army consists already of 24 regiments. It is meant perhaps so many colonels (which yet is much) but the question is whether or not every one of them (if he have so many) hath a regiment complete. They give out here that there are already within the Emperor's domains at Moravia and Upper and Lower Austria above 100,000 veterans and new levied soldiers.[4]

Unfortunately when the strengths of the regiments were printed in newsletters etc. they always quoted the number of men the colonel had been commissioned to raise, rather than the accurate figures, so it is difficult to know how successful the recruiting of new levies had been and to calculate the exact number present when it came to a battle. Certainly despite Wallenstein boasting that he would have an army of 70,000 men, on 8 July 1625 it was said that the levies raised by Wallenstein "are not so great as it was reported". Another newsletter, this time dated April 1627, recalled that Wallenstein's army was only 20,000 strong rather than the 80,000 men previously reported.[5]

On 21 May 1628 Maximilian granted more commissions to raise 12,000 foot and 3,000 horse and on 22 April 1631 he issued further commissions to bring the field army of the Catholic League up to 40,000–50,000 men.[6] However, the known strengths of regiments at this time would suggest that he was not very successful in his aim.

Despite offering good enlistment money Count von Fugger was forced to send commissioners as far as Hungary and Poland to raise men. This was not

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foreign, Holland (United Provinces) 1623–1626, f.104; SP 101/30, Newsletters foreign, Germany 1632–1634, ff.15, 22.

[3] TNA SP 101/28 f.145; *The Continuation of our Weekly News,* 30 May 1625, no. 24, p.8.

[4] TNA SP 101/29, Newsletters foreign, Germany 1626–1631; SP 80/8, Anstruther to Sir Henry Vane f.167.

[5] *Ibid.*, ff.141, 431.

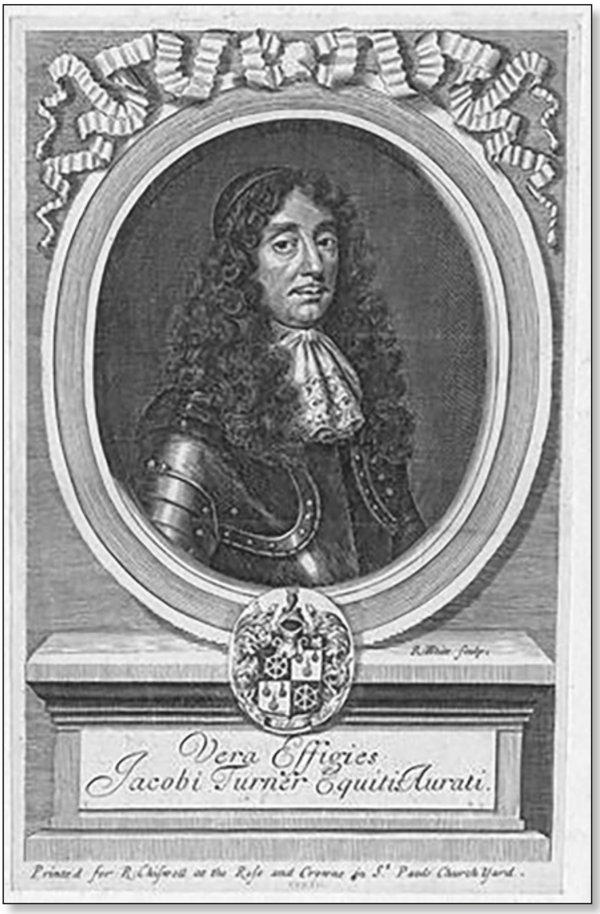
[6] *Ibid.*, ff.115, 207.

unique: as long as they had permission from the ruler they could recruit anywhere. England and Scotland supplied many regiments to the Dutch, Swedish and German armies during the war and King James I even allowed Spain to recruit a regiment in England.

However, recruiting parties did not always get a warm welcome. As one newspaper dated 14 October 1622 reported, in Frankfurt:

> Here arrived a Bavarian commissioner in the name of his Imperial Majesty and his Highness of Bavaria, his request is that the Burgomaster of the city would permit him to levy certain soldiers in our town and there about, for the Emperor's Service and that they might likewise be maintained at the charge of the citizens and be billeted in their houses until the general muster. But the Burgomaster hath excused himself from granting either request.[7]

In August 1628 some captains who had been commissioned by the Duke of Bavaria "to make some levies of men about Ulm and Augsburg, the commissary of those parts hath refused, saying it would be prejudicial to the Emperor's [service]". Nuremberg also refused appeals from officers from the kings of Denmark, France and others who wanted to raise recruits in the city. However, on 10 March 1629 Nuremberg gave Captain Christopher Fontana of Wallenstein's Army permission to recruit in the suburbs without the beat of the drum, the traditional sign that a company or regiment was to be raised, and he was not allowed to recruit any citizens of the town, only "foreigners" and travellers. Fontana's company was to leave Nuremberg as soon as it had been recruited and to not be a burden to the city.[8]


Vera Effigies
Jacobi Turner Equitis Aurati.
R. White sculp.
Printed for R. Chiswell at the Rose and Crowne in St. Pauls Church Yard.

Sir James Turner travelled from his native Scotland to fight in the German Wars. He was to publish the famous military treatise *Pallas Armata*.

Some officers resorted to tricks in raising their men, such as one Swedish officer in 1643, who failing to find enough recruits is reported to have thrown money into the streets of Erfurt; if anyone picked up the money they were instantly recruited into his company. If they refused then he imprisoned them until they finally agreed to enlist.

Men joined the army for many different reasons. In 1624 at the age of 16 the future Parliamentarian general Sydnam Poyntz recorded why he enlisted: "[Having been] bound an apprentice that life I deemed little better than a dog's life and base. At last I resolved with my self thus, to live and die a soldier would be as noble in death as life, which resolution took strong root in me, that not long after … [I enlisted as] a private soldier."[9]

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[7] *Courante relating to divers particulars concerning news out of Italy, Germany and Turkey 1 November 1622.*

[8] TNA, SP 81/13, State papers, Foreign, Germany, f.174; *Advise from Swabland 13/23 August 1628.*

For Sir James Turner it was a choice between his studies and fighting for the Protestant cause under Gustavus Adolphus.

Unfortunately Augustin Fritsch, who wrote an account of his life in the Bavarian Army, does not record why he enlisted in 1618 as a musketeer in Colonel Schmidt's Regiment of Foot aged 19. However, Peter Hagendorf recorded that he enlisted in Pappenheim's Regiment of Foot "because I was completely down and out". Social deprivation was a major cause for many enlisting in the army. A survey of 1,069 recruits in the Bavarian Army between 1638 to 1648 shows the following trades.[10]

Trades	**Number**	**Percentage**
Shopkeepers	17	1.6
Food and guest trades, inc. butchers, millers, brewers	173	16.2
Clothing & textile trades	299	28
Building, wood & metal processing trades	178	16.7
Transport trades, e.g. carters	12	1.1
Paper trades, inc. papermakers & binders	12	1.1
Educated, e.g. students & teachers	16	1.5
Agriculture, e.g. labourers, cattle breeders	203	19
Soldiers' sons	23	2.7
Other trades, e.g. servants, cooks, basketmakers	70	6
Unskilled	51	4.7

We know some of the names of those recruited into the Bavarian Army, such as Jacob Graft, a bricklayer of Munich who was recruited in 1638, and Stefan Ambacher, a carpenter of Kitzbichl, who was recruited the following year.[11] This can be compared with the French Army where 52 percent of recruits came from towns, although between 1635–1643 the percentage from the country was higher than the townsmen.[12]

Sir James Turner states that:

> most captains conceive sixteen to be too young, and if so I swear sixty is too old; they need not be twenty … [but] they may pass muster of eighteen; and if

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[9] Sydnam Poyntz, *A Relation of Sydnam Poyntz, 1624–1636* (Royal Historical Society, 1908), p.45.

[10] Jan Peters, *Ein Soldnerleben im Dreissigjährigen Krieg* (Berlin: Akadamie Verlag, 1993), p.42; Kasper, pp.271–273.

[11] Alfred Baumeister, 'Bayerische Rekrutem Im Dreissigejahrigen Krieg', in Adolf Roth, *Blatter des Bayerischen Landesvereins für Familienkunde*, vol. 3, part 3 (Munich, 1940), pp.47–52. Unfortunately, for the majority of other recruits only their name and town are given.

[12] Robert Chaboche, 'Les Militaires et la societe', *Revue D'Historie moderne et contemporaraine*, no. 20 (1973), p.16. Before 1635 107 were townsmen, 86 from the country, from 1635–1643 187 were from towns and 208 from villages, and from 1643–1648 177 from towns and 160 from villages.

> they be not infirm wounded or mutilated, they may well enough continue [being] soldiers till they be fifty and upwards, though some think they should not serve after the forty six years of their age.[13]

A survey of 900 soldiers serving in the Bavarian Army between 1638 and 1648 shows the following ages:

Age	15–19	20–25	26–29	30-35	36–39	40–45	46–49	50–55	56–59	60
No.	159	405	108	80	33	49	8	8	3	0

This should be compared to ages of the soldiers in Prince Christian August of Schleswig-Holstein's Regiment of Foot in 1696:[14]

Age	**<15**	15–20	21–25	25–30	31–35	36–40	41–45	46–50	51–55	56–60	> 60
No.	1	28	136	136	56	39	19	20	2	3	1

Those soldiers who left England between the 30 December 1628 and 31 July 1629, whose ages are known, numbered as follows:[15]

Age	21–25	26–29	30-35	36–39	40–45	46–49	50–55	56–59	60
No.	187	56	66	22	21	10	11	3	1

Therefore it is clear that the majority of soldiers who served in the army were in their early 20s. Presumably in the case of the English recruits they were younger soldiers going to enlist in the various armies at this time, but anyone under 21 was considered a minor and therefore was not listed in the port books.

Like most armies at this time the Bavarian Army was not just composed of Bavarians, as the following chart shows:[16]

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[13] Sir James Turner, *Pallas Armata* (London, 1683), p.166.

[14] Peter Burschell, *Soldner im Nordwestdeutschland des 16 und 17 Jahrhunderts* (Gottingen: Vandenhoeck and Ruprecht, 1994), p.118.

[15] Kasper, p.269; TNA, E157/14, Register of soldiers taking the oath of Allegiance and register of licences

to persons to pass beyond the seas, 1628–1629.

[16] Kasper quoting Kurbayern Ausseres Archiv 2809 f.115, and 2608 ff.279–291.

	Gil de Haas' Regiment of Foot, 11 February 1645		**Bartl's Regiment of Dragoons, 20 December 1648**	
Nationality	**No.**	**Percentage**	**No.**	**Percentage**
Bohemian	14	1.35	12	1.72
Brabantian	-	-	2	0.28
Burgundian	43	4.15	2	0.28
Croatian	2	0.19	-	-
Dalmatian	18	1.74	-	-
English	-	-	1	0.14
Flemish	-	-	4	0.57
French	15	1.48	9	1.29
German	534	51.64	632	90.67
Greek	26	2.51	-	-
Hungarian	5	0.48	2	0.28
Irish	1	0.09	1	0.14
Italian	218	21.08	6	0.86
Lorrainese	24	2.32	10	1.43
Dutch	-	-	2	0.28
Polish	54	5.22	4	0.57
Scottish	2	0.19	0	0
Sicilian	1	0.09	0	0
Slovenian	51	4.93	0	0
Spanish	11	1.06	1	0.14
Swedish	0	0	1	0.14
Swiss	0	0	2	0.28
Turkish	15	1.48	0	0
Walloon	0	0	4	0.57
Total	**1,034**	**100**	**695**	**100**

By the 1630s there were no Englishmen serving in the Army of Saxony, and during the 1640s just three, although this data is taken from a smaller number of men.[17]

There were exceptions to these mixed nationality regiments. Johann von Tilly's Regiment of Foot was said to have been composed of 2,000–3,000 Walloons, whereas 2,000 Frenchmen formed Florenville's Regiment. The Dutch Army segregated each nationality into regiments, with the Dutch, English, Scottish and French forming their own regiments and brigades. Therefore there was no language barrier in these units and it also encouraged rivalry between each nationality. On the other hand this meant they could not easily recruit each regiment, and so many were understrength until a new draft from their respective country arrived.[18]

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[17] The data is taken from just 916 in the 1630s and 2,844 during the 1640s. Staiano-Daniels, p.56.

Although Maximilian usually relied on volunteers to fill the ranks of his army, with Bavaria about to be invaded he resorted to conscription. On 30 January 1632 Maximilian held a general muster of all his subjects between the ages of 18 and 40, but only 24,000 men appear to have been present. He also wrote to Tilly that he was putting the militia into a posture of defence and that, "a number of single peasants' sons can be impressed … taken from our lands of Bavaria so that the infantry regiments that have lost heavily can be nearly brought back up to strength." On 14 February 1632 Amberg reported to Maximilian that 2,000 single men had arrived, although at Sickenhausen only about 300 of the 3,380 men conscripted arrived, many having run away. It was the same story in Haimburg where the single men who had been chosen to serve refused to turn up at their rendezvous.[19]

Maximilian was not the only head of state to rely on conscription. In May 1623, when the Duke of Brandenburg decided to raise an army of 3,000 foot and 500 horse, he conscripted one man in every five in the towns and cities and one in every 10 in the countryside. Moreover despite his use of foreign mercenaries Gustavus Adolphus had to rely on conscripts from Sweden, who were in theory meant to be between the ages of 18 and 40, but as the war dragged on it became more and more necessary to call up boys as young as 15 and men as old as 65. Usually those who were a burden on a parish or town were conscripted first, but from 1627 in Sweden it was forbidden to employ a substitute to take their place. This resulted in some conscripts mutilating themselves to avoid military service.[20]

Whatever their age or background the recruits assembled at the *Laufplatz* within their various towns and villages, from where they would be sent to the rendezvous or *Sammelplatz* (assembly place) in the district, before finally being marched to the *Musterplatz* (muster place). Sometimes the recruits appear to have made their own way to the muster place, which had been common practice in the sixteenth century.[21]

On enlistment a recruit's name would be written on a muster roll, which usually also included a brief description of the man, his age and profession. The recruit would receive a sum of money, or *Werbegeld*, which was also known as *Handgeld*, how much it was depended on how much demand there was for recruits at that time, but it marked his process from a civilian to a soldier. He would also receive an allowance, or *Laufgeld*, which would cover his travelling expenses to the muster place, which was between eight and 13 thalers a day. Between 1619 and 1631 accounts show that Bavaria spent 158,942 fl 32 kr on *Werbegeld* and *Laufgeld*, whilst an account for the Catholic League's army dated 5 February 1621 records that about 22,500 fl was spent on *Laufgeld* due to raising three regiments and a further 157,800 fl was needed to train these recruits.[22]

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[18] Walter Goetz, *Die Politik Maximilians I Von Baiern und seiner Verbündeten, 1618–1651*, vol. 2, part I (Leipzig: B.G. Teubner, 1907), p.5.

[19] TNA, SP 101/30, Newsletter, Foreign Germany, 1632–1634 unfolio; Eugene von Frauenholz, *Das Heerwesen in der Zeit des Dreissigjährigen Krieges* (Munich: Beck, 1938–39), vol. 2, pp,247–248.

[20] Michael Roberts, *Gustavus Adolphus, a History of Sweden 1611–1632* (London: Longmans, Green and Co., 1958), vol. 2, p.208.

[21] Redlich, vol. 1, pp.272–273.

However, raising recruits was one thing, getting them to the rendezvous was another. Having received their money many recruits sought to desert as Prince Charles Louis, Frederick V's eldest son, found out:

> When I write to you by Colonel Steinacher I had a list of above 800 new levied men … [but] there is arrived here not about 300, the rest run away, after they had been brought with a great deal of pains and charges and wanted nothing. Of these there were 70 English who ran all away, except very few.[23]

When Salis raised his regiment of horse he first chose the town of Mühldorf for his muster place, then in March he also gathered soldiers at Eichstadt, whereas Pappenheim chose Ulm for his regiment of foot. Sometimes a regiment might have more than one muster place: in October 1644 when Gil de Haes raised his regiment of foot he chose Wasserburg, Rosenhelm, Wellheim, Schongau, Tolz, Landesberg and Friedburg, presumably one town for each company.

Unfortunately Hagendorf does not mention much about his time as a new recruit in Pappenheim's Regiment only that, "from there [Ulm] we moved out to our muster place in the Upper Margraviate of Baden. There we lay in our quarters, gorged and boozed, and it was good." He also found time to marry the "highly virtuous Anna Stadlerin", from Bavaria.[24]

In 1611 Maximilian had instructed these muster places to be kept open for six days. Once all the company had arrived they were issued with weapons and clothing and on the ninth day they were to be inspected by their officers. Finally the recruit would take an oath of allegiance to his officers and ruler. It has also been suggested that the soldiers may have hammered a nail into the staff of their ensign or cornet, so sealing their oath, although the ensign and cornet staffs preserved in Stockholm do not support this theory. Finally the provost would read out the laws of war, which laid down the strict discipline the soldier was to follow.[25]

Not all towns wanted to be muster places. In 1627 Nuremberg bribed Hans George Margrave of Brandenburg 16,500 fl to not be one, and Julius Heinrich Duke of Saxe Lauenburg and his lieutenant colonel received 900 fl and 183 fl respectively not to use the city as a muster place. Nuremberg also made other payments to officers to make their troops move on quickly or if they were forced to quarter the troops within the city then the officers were to guarantee their good behaviour.[26]

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[22] Heilmann, vol. 2, p.885; Redlich, vol. 1, pp.272–273, 483–484; Duch, pp.75–76.

[23] TNA, SP 81/45, State Papers Foreign, Germany, Prince Charles Louis to Secretary Roe, 30 October 1638, ff.204–205.

[24] Helfferich, p.280.

[25] Herbert Langer, *The Thirty Years War* (Poole: Blandford Press, 1978), pp.92–93.

[26] TNA, SP 101/46 f.104; Redlich, pp.339–341.

One way of obtaining a large number of well-trained soldiers was offering prisoners of war the option to change sides. After the battle of Nördlingen in 1634 1,494 men from the Swedish Army re-enlisted in the Bavarian Army and a further 2,487 Frenchmen after Herbsthausen. However, they were not always reliable, as Robert Monro recalled regarding the 1,000 strong garrison of Donavert in 1632 who were "forced to take service" with the Swedish Army: "being Papists of Bavaria, as soon as they smelt the smell of their fathers' houses, in less than ten days they were all gone". In 1648 Maximilian ordered that only German deserters could enlist in his regiments of foot.[27]

On 2 January 1632 it was reported from Nuremberg that, "Hither do daily come running from their colours 10 or 12 of Tilly's soldiers at once" who re-enlisted in the Swedish service.[28] At the same time Tilly was said to have "brave cavalry but very poor and impotent foot forces. In their march from Ansbach to Guntsbach they left behind them in the streets and ways above 1,500 sick and dead soldiers." However, soldiers did not necessarily have to change sides. When Wallenstein was raising his army many of Tilly's soldiers deserted to enlist under Wallenstein, knowing that newly raised regiments would have better resources available to them.[29]

Once a regiment or company had been raised recruits were always needed to keep it up to strength, although this was practically impossible, especially after a battle as the following chart shows:[30]

Date	Gayling's Regt. of Cuirassiers	Mercy's Regt. of Foot
Mar 1639	924	-
Nov 1640	930	1,327
1642	967	1,500
Dec 1642	840	660
1643	888	841
Jan 1644	934	1,087
Dec 1644	940	1,031
Nov 1645	872	822
Feb 1647	891	688
Jul 1647	868	707
Feb 1648	985	603
Nov 1648	941	703

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[27] Wilson, *The Thirty Years War: A Sourcebook*, p.829; Monro, part II, pp.114–115; Redlich, p.456.

[28] British Library (BL), Burney Collection, LR 263/C/7 *The Continuation of our Foreign News since 24 to 30 January 1632.*

[29] BL, Burney Collection, LR 263/C6/5 *The Continuation of our Foreign News since 2 to 12 January 1632.*

[30] Kasper, pp.221–249.

Gayling's regiment had been raised in 1620 and Mercy's in 1619, although they were not the original commanders, and between 1639 and 1648 Gayling's Regiment saw action at the battles of Wolfenbüttel in 1641, Tuttlingen on 5 May 1643, Herbsthausen in 1645, Allerheim on 3 August 1645, and Zusmarshausen in 1646; and Mercy's at Freiberg in 1644, Jankau on 23 February 1645, Allerhein and Zusmarshausen. How many of the soldiers in these two regiments in 1620 were still with the colours in November 1648 is not known.

3

Organisation

During the War the Bavarian Army consisted of 21 regiments of foot and 30 regiments of horse, 18 of which were raised between 1619 and 1620. The remaining regiments were raised throughout the war; although 11 would be disbanded during this time, this was the exception rather than the rule and regiments within the army had a surprisingly long regimental history compared with other armies, although almost all regiments changed colonels several times during the war. One regiment of cuirassiers commanded by Colonel Herman von der Lippe from 1619 passed to Adolphus von Eynatten in July 1620; in 1624 a Colonel de Grana took command of the regiment, but despite this poor start it was finally only disbanded in 1649, albeit with three further colonels having commanded it.

As well as commissioning new regiments Maximilian also increased, and decreased, the strength of existing regiments, by commissioning new captains to raise men. This not only had the benefit of creating strong regiments, but also it did not drain Bavaria's war chest by paying for additional colonels, majors and other regimental staff. Although commissioning a regiment or company to be raised was one thing, paying for its existence was another. Pappenheim's Regiment of Foot cost 548,738 fl 57 kr between 1626 and 1644, whereas his regiment of horse cost 436,462 fl 46 kr between 1620 and 1624. It is usually stated that in 1627 Pappenheim took command of the regiment which had originally been commanded by Colonel Hans Ernest Sprinzenstein, but these accounts suggest they were two different regiments, with Sprinzenstein's costing 817,635 fl 52 kr between 1622 and 1631. The six companies of the regiment had passed to its Lieutenant Colonel Hubner in 1624 and three were massacred in the Upper Austria in 1626 along with their colonel, while the other three remained in the Upper Palatinate. According to these accounts the total cost of keeping the Bavarian Army in the field during the war was 58,816,725 fl 43 kr.[1] However this figure is almost certainly an underestimate

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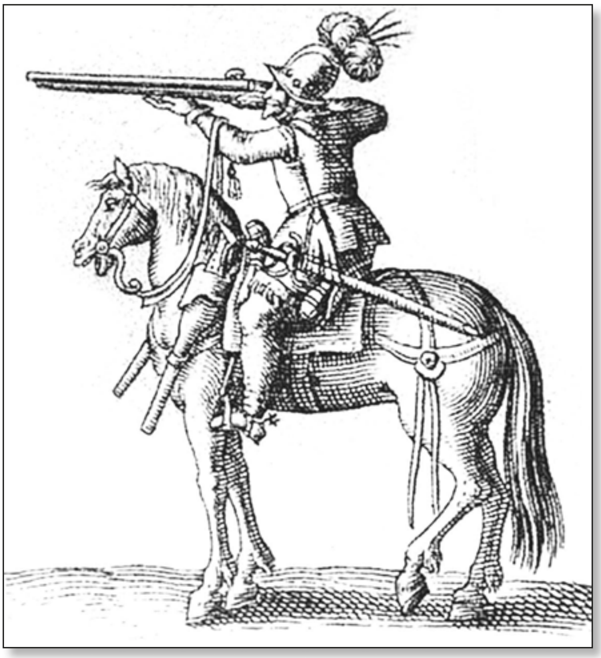
[1] Walter Goetz, 'Die Kriegskosten Bayerns und der Ligastände im Dreissigjährigen Kriege', in *Forschungen zur Geschichte Bayerns*, vol. 12 (Munich and Berlin: R Oldenbourg, 1904), pp.121, 123; Franz Weber, "Gliederung und Einsatz des bayerischen Heeres im Dreissigjährigen Krieg", in Hubert Glaser, *Um Glauben und Reich, Kurfürst Maximilian I* (Munich: R. Piper & Co. 1980), p.470.



A typical depiction of a mounted harquebusier from the early part of the Thirty Years' War.

since Theodor von Haimhausen's Regiment of Foot, which later became Werner von Tilly' Regiment, had an additional four colonels before it was disbanded in 1649, whereas the accounts show the expenditure only up to 1634, and other regiments are not listed at all.[2] This enormous sum of money was offset by the imposition of taxation and "contributions" on areas as well as a 1,529,088 fl 4 kr Papal subsidy between 1620 and 1634 and a Spanish subsidy of 504,898 fl 29 kr between 1620 and 1637.[3]

Like most armies of the period the size of regiments within the army varied considerably; in 1621 the cavalry regiments mustering between two and six troops, Colonel Franz von Herzelles' Regiment of Cuirassiers being the strongest at 669 men and Cronberg's being the weakest with just 179 men. On 10 April 1623, due to losses on campaign, Maximilian ordered that 31 troops of horse and six companies of foot be disbanded and the men dispersed into the remaining units.[4]

However, by 13 February 1626 there had been a further increase in the strength of cavalry with Cronberg's Regiment mustering 823 troopers in eight troops and in 1633 the regiment had 1,078 men in 13 troops. On the other hand Billehe's Regiment mustered 621 men in nine troops in the same year. Not all troops served with their colonel, for example Johann von Werth's Regiment of Horse: it was commissioned to be raised in 1631 and mustered 2,020 men in 18 troops in 1634, but only 12 troops served with the main field army, the other six had been detached for other duties. Likewise three troops of Cronberg's Regiment formed part of the garrison of Munich, while the other 10 were with the army.[5]

Unfortunately these numbers could not be kept up indefinitely, and by 1635 only Werth's, Billehe's and Fürstenberg's had 10 or more troops, the other 11 regiments of horse having five or six troops. A newspaper dated 15 March 1632 reported that Tilly's cavalry:

> are old beaten soldiers, being some of those that were at the battle of Leipzig [Breitenfeld] and these are good men generally one with the other. As for his foot they be raw and new levied fellows for the most part made here to serve against their will and such have no heart to grapple with the king of Sweden.

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[2] Goetz states that the accounts cover the years 1620 to 1624, but judging from the sum of money, 1,153,991 fl 21 kr, this is a mistake for 1634. The accounts state for Colonel Schmidt's Regiment an expenditure of 1,228,737 fl 17 kr between 1620 and 1634.

[3] Walter Goetz, 'Die Kriegskosten Bayerns', p.114. No Papal subsidies were paid during 1628–1631, and no Spanish subsidies between 1622 and 1627, and 1629 and 1633.

[4] Maximilian to P. Valeriano, 10 April 1623, printed in Goetz, *Die Politik Maximilians I*, p.121.

[5] Heilmann, vol. 2, pp.919–923.

However many newspapers were published for propaganda purposes so must be taken with some care; although many soldiers probably did wish “they had much rather be at home at their ploughs and spades” as the newspaper claimed, this was due to them not wanting to be soldiers rather than any fear of Gustavus Adolphus.[6]

Moreover, finding recruits to fill their ranks was one thing, finding horses for the cavalry was another matter. At a muster held on 21 January 1639 the regiments were divided into mounted and dismounted troopers as follows:[7]

Regiment	**No. Troops**	**Mounted**	**Dismounted**	**Total**
Götz	10	800	200	1,000
Wahl	10	400	160	560
Behlen	10	400	140	540
Wartenberg	10	350	150	500
Harthausen	6	300	150	450
Truckmuller	6	300	166	466
Kolb	9	400	200	600
Redetti	6	150	80	230
Meissinger	5	218	72	290
Lohn	2	150	50	200
Ruischenberg	6	-	-	-
Croats	1	90	40	130
Total	81	3,558	1,408	4,966

In other words about a fifth of the cavalry could not perform their duty since they did not have horses. It was not just the lack of horses that hindered a regiment, as the following chart of a muster taken in October 1643 shows:

Regiment	**Total Strength**	**On foot**	**Hurt horses**	**Captured**	**Sick & Wounded**	**Missing**
Werth	935	58	111	15	16	-
Mercy	682	26	74	6	8	1
Reihling	888	80	42	10	17	5
Druckmuller	845	70	103	12	12	16
Kolb	752	35	93	11	2	-
Sporck	1,060	32	111	26	22	-
Lapierre	753	87	100	16	6	-
Kongisbeck	371	90	49	1	-	-
Total	6,286	478	683	97	83	22

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[6] BL, Burney Collection, LR 263/C6/10, *The Continuation of our Foreign News*, 15 March 1632.

[7] Heilmann, vol. 2, p.924.

To put it another way, of the total of 6,286 men, only 4,965 were mounted leaving about a third of the cavalry on foot or mounted on wounded horses.[8]

Despite this shortage of horses, on 14 February 1647 the staff of Sporck's Regiment had 166 horses, including 17 for the colonel and 10 for his lieutenant colonel, and Sporck himself as a major general was allowed 35 horses. In addition the regiment was allowed 1,632 horses to pull its baggage train.[9]

The staff of a regiment of horse included not only the senior commanders – that is, a colonel, lieutenant colonel and major (who also held the rank of a captain) – but also a chaplain, quartermaster, wagon master and a provost and his deputy who were responsible for imposing discipline in the regiment.[10]

Each troop consisted of the following officers and no matter how strong the troop was, it always had its full complement of officers:[11]

German Ranks	English Ranks
1 Rittmeister	Captain
1 Leutnant	Lieutenant
1 Wachtmeister	Cornet
Fourier	Quartermaster
2 Corporal	Corporal
Musterschreiber	Clerk
Feldscherer	Surgeon
3 Trompeter	Trumpeter
Sattler	Sadler

The cavalry was divided into four types at this time: cuirassiers, harquebusiers, dragoons and Croats/Crabats. Cuirassiers were heavy cavalry armoured from head to knee, with their lower legs protected by leather riding boots. They were usually armed with two pistols and a sword. However, the armour was heavy and according to Sir Edmund Verney, who wrote about his experience during the English Civil War, "It would kill a man to serve in a whole cuirass. I am resolved to use nothing but back, breast and gauntlet." The Parliamentarian Edmund Ludlow also agreed with Verney: being dismounted, he records that "I could not without difficulty recover on horseback being loaded with cuirassier's arms." It was because of these difficulties and their expense that many men discarded their cuirassier armour, even though cuirassiers were seen as the senior form of cavalry. When the Imperial general Montecuccoli wrote to the Duke of Modena he suggested that "[the] cuirassier should be equipped with breast and back harness, storm hat [helmet] together with two pistols and a sword. This is

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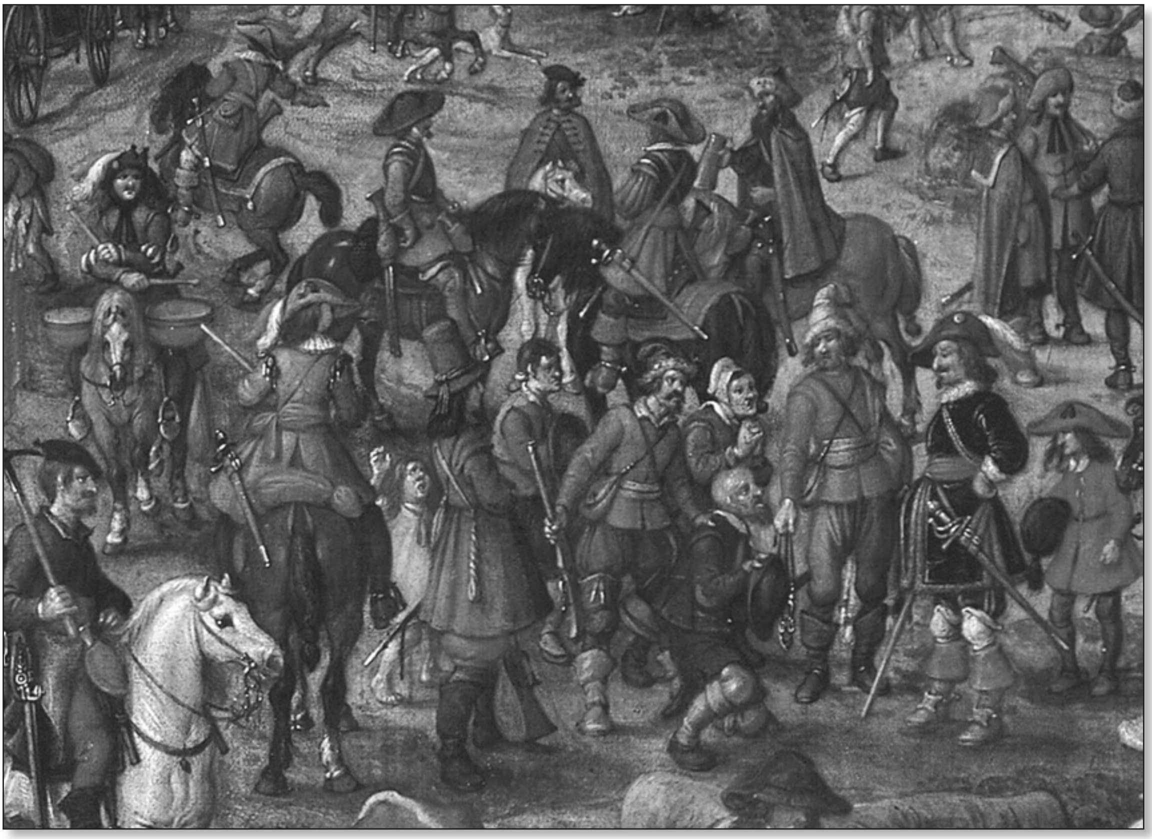
[8] Heilmann, vol. 2, p.18.

[9] Heilmann, vol. 2, pp.926–927.

[10] Ronald Sennewald, *Das Kursächsische Heer im Dreissigjährigen Krieg* (Berlin: Zeughaus, 2013), p.593.

[11] Sennewald, p.593.



Examples of late Thirty Years' War Imperial/Bavarian cavalry and Croat light horsemen. Sebastiaen Vrancx.

the way the Swedish cuirassiers are armed." Lancers were armed similarly armoured to the cuirassiers but with the addition of their lances.[12]

When General George Monck wrote his *Military and Political Affairs* he stated, "I have omitted here to speak anything of the armour of the cuirassier, because there are not many countries that do afford horses fit for the service of cuirassiers." John Cruso does not say how many hands a cuirassier horse should be, but that it should "not [be] inferior in stature and strength, though not so swift". Cruso does record that a lancer's horse should be "15 hand high at the least, strong swift and well managed", which was the same phrase he used for a harquebusier's horse.[13]

In theory harquebusiers wore a buff coat underneath their backplate and breastplates and a helmet, although in practice they might wear either a buff coat or a backplate and breastplate. Their offensive arms were two pistols, a carbine and a sword.

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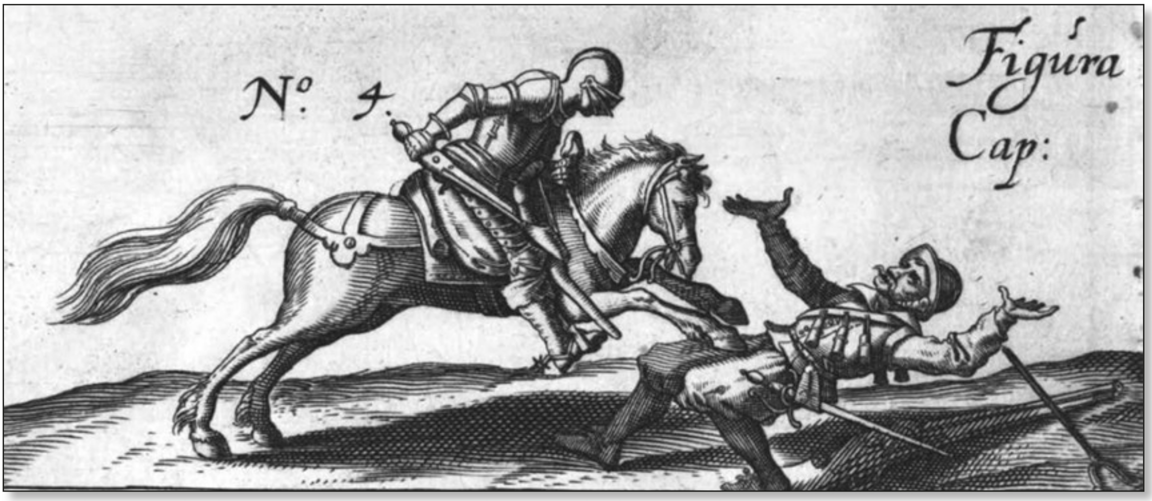
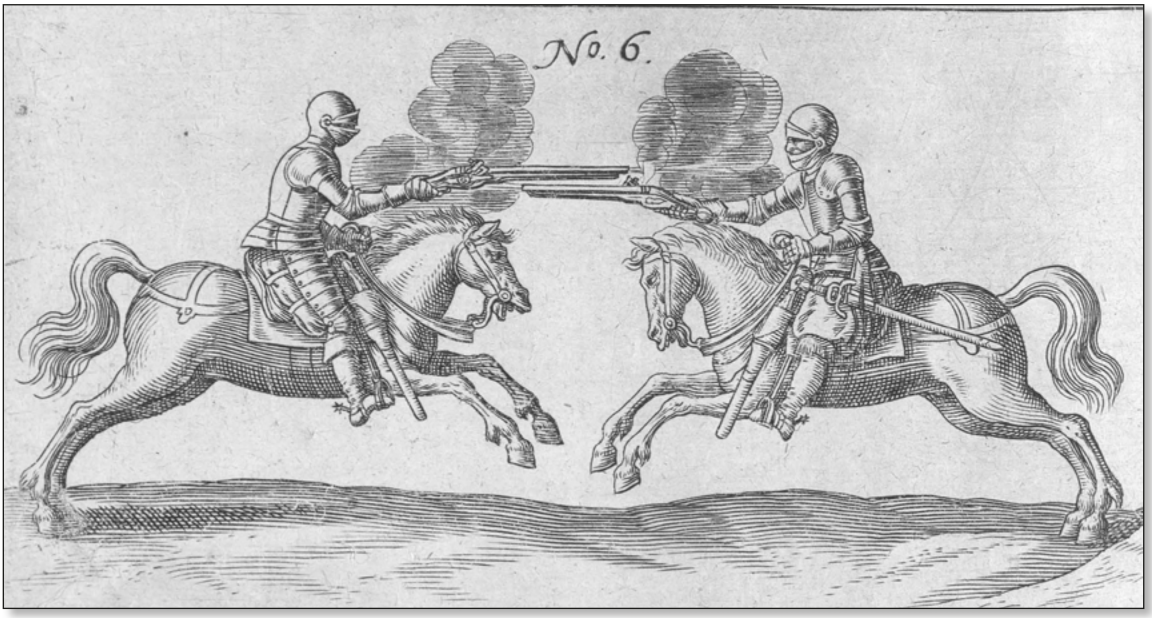
[12] Quoted in David Blackmore's *Arms and Armour of the English Civil Wars* (Royal Armouries, 1990), pp.8–9; Thomas Barker, *The Military Intellectual in Battle; Raimondo Montecuccoli and the Thirty Years War* (Albany: State University of New York Press, 1975), p.110.

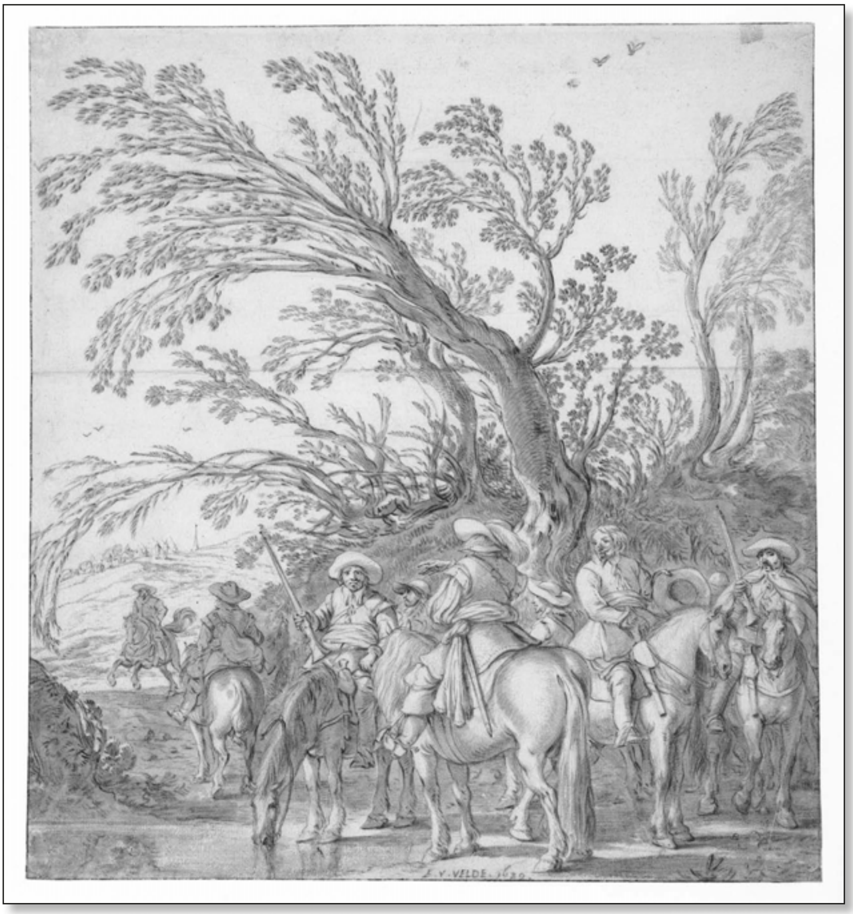
[13] George Monck, ed. John Heath, *Observations upon military and Political Affairs written by the Most Honourable George, Duke of Albemarle* (London: Henry Mortlocke, 1671), p.25; John Cruso, *Militarie instructions for the Cavall'rie*, pp.28–29, 31.



Above: a cuirassier about to run down a rather unlucky musketeer. Johann Jacobi von Wallhausen, *Ritterkunst*, 1616. (Michał Paradowski's archive)

Below: Fighting cuirassiers. Johann Jacobi von Wallhausen, *Kriegskunst zu Pferd*, 1616. (Rijksmuseum)





Unarmoured cavalry.
Esaias van de Velde, 1630.
(Rijksmuseum)

Although regiments were often referred to as "cuirassier" or "harquebusier" regiments they sometimes had a mixture of troops, for example Colonel Adam von Herbersdorf's Regiment of Horse, which in 1621 consisted of four cuirassier troops and three of harquebusiers even though it was referred to as a cuirassier regiment. In 1622 Herbersdorf recruited additional troops which once mustered were divided into three regiments, two commanded by Herbersdorf himself and the other by Gottfried von Pappenheim, who had been the regiment's lieutenant colonel the previous year. In fact Herbersdorf appears to have been one of only a few commanders in the Bavarian Army to have commanded more than one regiment. Pappenheim's Regiment consisted of five troops, four of which were harquebusiers and his own troop were cuirassiers. While in 1647 Colonel Casper Schoch's Regiment consisted of six troops of harquebusiers and two companies of dragoons, which were mounted infantry.[14]

Originally dragoons were armed with pikes and muskets; according to Wallhausen a company was to muster 200 men, half with pikes and half with muskets. When mounted the pikemen were to form up 10 files

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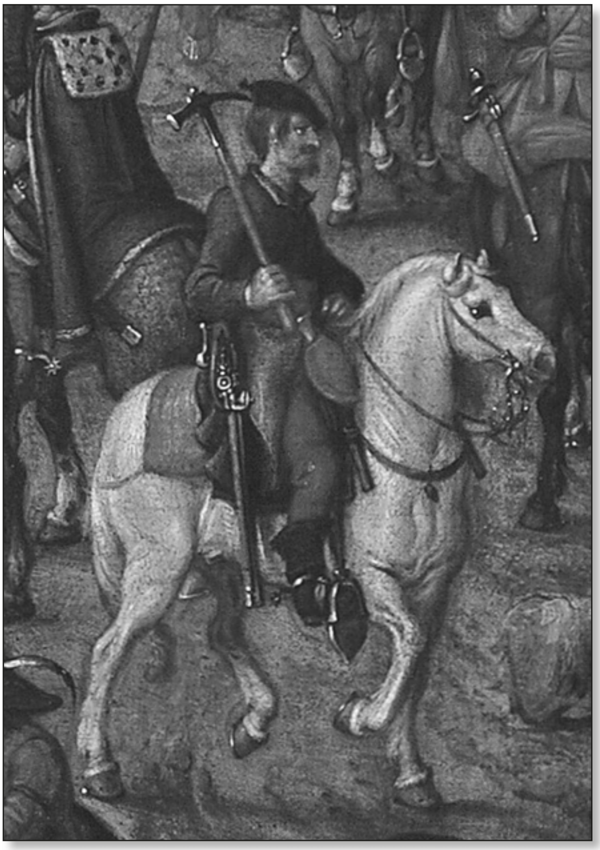
[14] Stadler, p.112.



Croat light horseman, by Sebastiaen Vrancx.

by 10 ranks, whereas the musketeers were to be divided into two blocks of five files by 10, positioned either side of the pikes.[15] According to Cruso a dragoon's horse was to be the "least price, the use thereof being but to expedite his march, alighting to do his service". Whether there were any dragoons armed with pikes in the Bavarian Army is not known, but in 1634 there were 16 companies of dragoons mustering a total of 1,080 men. Five of these companies were attached to cavalry regiments, leaving just two regiments of dragoons: Werth's, which mustered 350 men in six companies, and 250 men in Metternich's Regiment of five companies. However in 1639 there was just one regiment, Wolf's, which mustered 423 men. The following year in addition to Wolf's Regiment there was also Ossena's Regiment mustering a total of 1,024 men. The Bavarian Army would continue to have just two regiments of dragoons until 1648, when one appears to have been disbanded.[16]

The lightest cavalry were known as Croats, or Crabats, although this was a term given to all light horseman no matter where they came from, such as Poland or one of the Cossack tribes. It was these "Croats" who were often blamed for the worst atrocities committed during the war, and they were even said to have eaten children. They were armed with a harquebus, a sword – which was rumoured to be poisoned – a dagger, and pistols. As well as having complete regiments of Croats, there were also troops attached to regiments of horse, such as that commanded by Colonel Otto Fugger.

Whatever type of cavalryman a recruit was allocated to be, he would have to be taught not only the various battlefield manoeuvres, but also how to mount a dummy horse, at first without arms and then with. Once he had mastered this he would then progress to the horse itself. After this part of the training was complete he would then learn how to ride and manoeuvre in formation. Lord Herbert of Cherbury records that when he was being taught how to fight on horseback he was given "a reasonable stiff riding rod … about the length of a sword and so rid one against the other" fighting and manoeuvring. Certainly this is how Johan von Wallhausen suggested that recruits should be taught, although he also suggested that cuirassiers should

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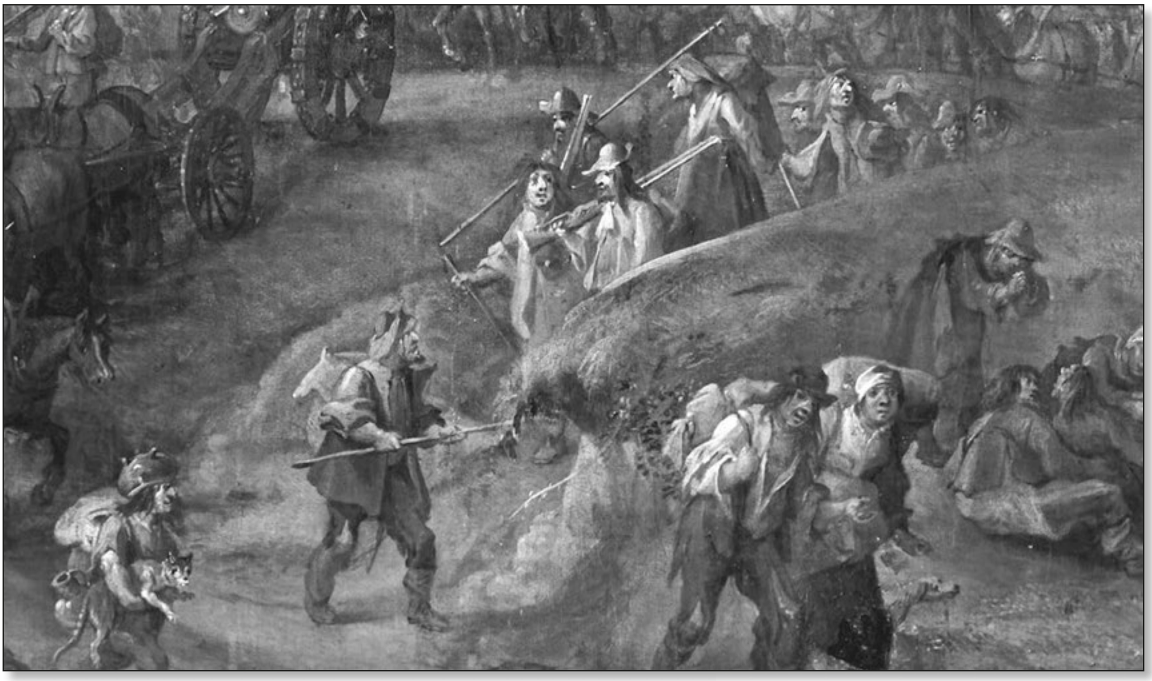
[15] Johann Jacobi von Wallhausen, *Art Militaire a Cheval. Instruction des principes et fondements de la cavalerie* (Frankfurt: Paul Jaques, 1616), pp.55–56.

[16] Kasper, pp.222–247.



An army on the march. Pieter Snayers. (Michał Paradowski's archive)

not only fight with swords, but also pistols, both firing and using them as clubs, and even wrestling an opponent on horseback as well as dismounted.[17]

In theory a German regiment of foot was composed of 10 companies each of 300 men, plus officers. However, when Maximilian was issuing commissions in 1619 and 1620 to raise his regiments of foot, six were to be 3,000 men strong, one was to be 2,000 strong and one, Colonel Theodor von Haimhausen's Regiment of Foot, was to number just 1,000 men. Why Maximilian chose regiments of different sizes regiments is not known, but when a muster was held on 5 July 1621 only one regiment, Gaisberg's, was at its full complement of 3,000 men. Mortaigne's Regiment, which was also meant to be 3,000 strong, mustered just 1,417 men; whereas Herliberg's, which was meant to be 2,000 men strong, mustered 2,598 men. The situation had not changed by 26 June 1622, but now Mortaigne's Regiment was 1,400 strong, although on paper it still mustered 3,000 men. During 1624 he had brought his regiment up to 1,900, but it was still short of the number of soldiers he had been commissioned to raise.

The regimental staff was similar to that of a cavalry regiment, and like the cavalry new companies were raised to try to keep up the regiment's strength: so that during the early 1620s only a few regiments had 10 companies, but in 1627 most had over 10 companies, with Anholt's Regiment, which still had 3,000 men, mustering between 13 and 16 companies. However, with the decline in the strength of the army by 1635, most regiments now had under 10 companies with only six out of the 11 regiments mustering over 1,000 men.

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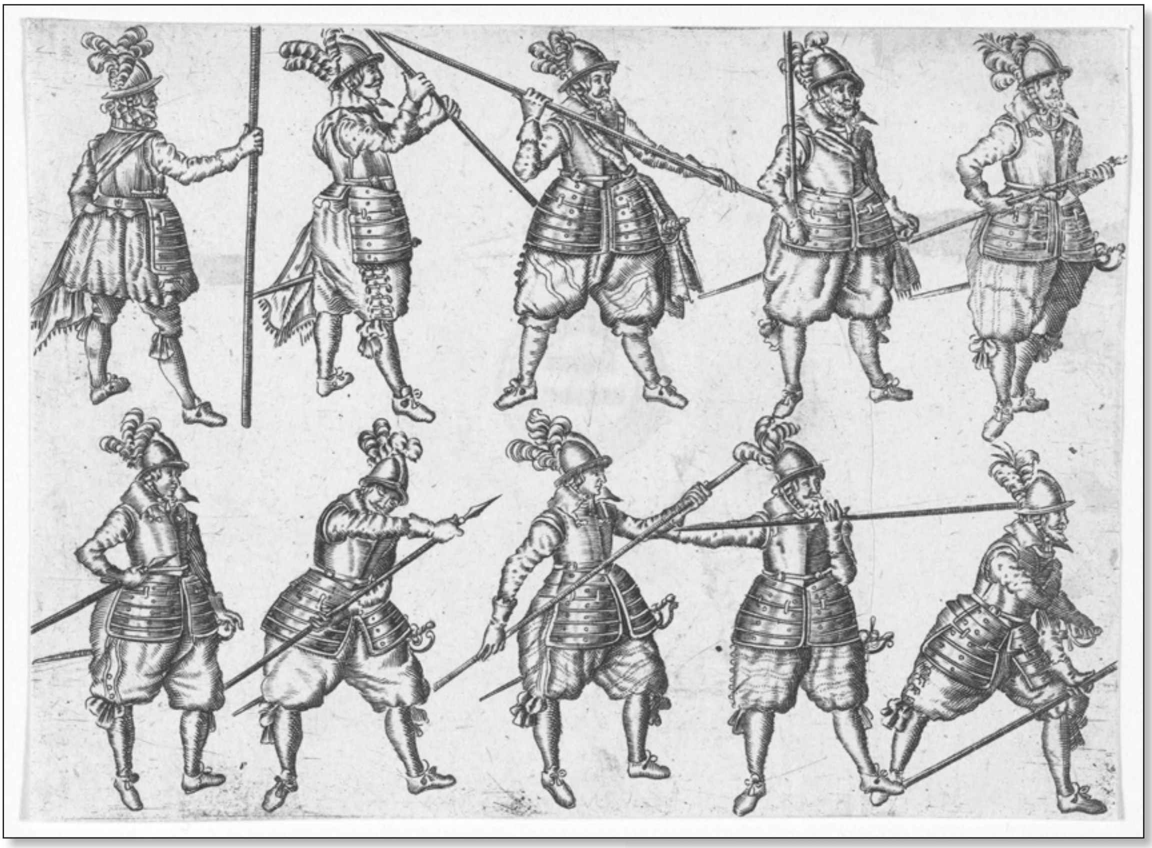
[17] Edward, Baron Herbert of Cherbury, *Life of Lord Herbert of Cherbury. Written by himself*, ed. H. Walpole (London: William Smith, 1847), p.22; Wallhausen, *Art militaire a Cheval*; TNA, SP 101/42, State Papers, Foreign Newsletters, f.243.



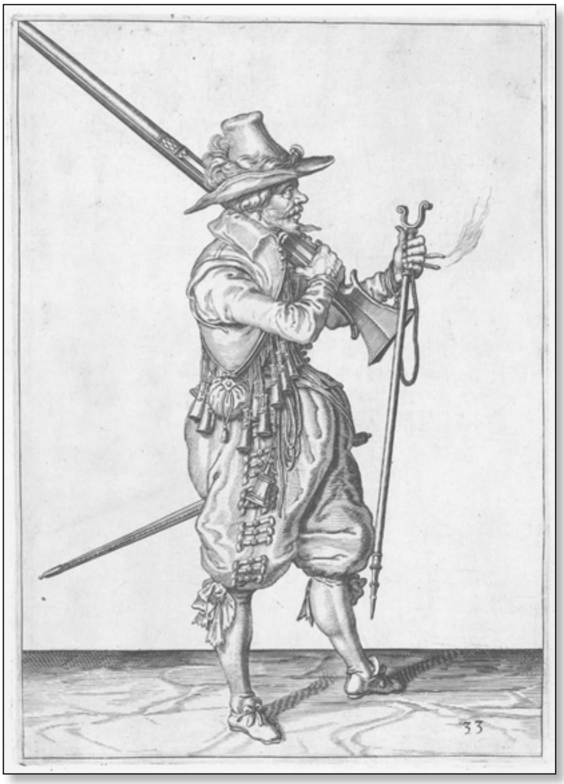
Early seventeenth-century armoured pikemen, based on Jacob de Gheyn II's drawings from 1608. (Rijksmuseum)

The strongest was Wahl's Regiment with 2,000 men in 11 companies. Three years later 13 regiments of foot mustered just 9,975 men in 93 companies and on 6 December 1642 the situation was even worse with just 8,700 men in 102 companies. In 1648 the 10 companies of Kolb's Regiment had just 805 men, giving an average of about 80 men per company.

Fortunately for Maximilian he did not need to commission large numbers of regiments, and of the 21 regiments of foot raised during the war, 14 were raised between 1619 and 1625 and a further four between 1631 and 1632. Only five regiments were disbanded during the war, whereas the Imperialist Army raised and disbanded many regiments during this time.

Each company contained a captain, a lieutenant, ensign, two sergeants, three corporals, three drummers, 25 lance pasadores or lance corporals, a surgeon and possibly a fifer. At the beginning of the war each company was divided into three types of soldier; musketeers, halberdiers and pikemen. In some companies harquebuses, lighter and less powerful muskets, were still being carried, although as the war progressed halberdiers and harquebusiers disappeared.

The pikemen took their name from their main weapon, the pike, which was between 16 and 18 feet long and made of ash about 4.5 cm thick. It had a steel head with two metal strips, about two feet long, running down the shaft of the pike, "well riveted" to its side to prevent the head being cut off. It has been suggested that pikemen used to cut their pikes down to a more manageable size, but in the Dutch Army at least this was forbidden, since it would put the soldier at a disadvantage when it came to battle and make a weakness in the formation. The pikeman also had a sword, and to protect himself he had, in theory, a backplate and breastplate; tassets, which protected the thighs; a gorget, which protected the neck; and a helmet. The halberdiers were similarly armed to the pikeman but carried a halberd which was also a pole weapon but with an axe-shaped head.



Early seventeenth century musketeer, based on Jacob de Gheyn II's drawings from 1608. (Rijksmuseum)

The musketeers were usually armed with a matchlock musket, although flintlock muskets were also issued and came in handy when guarding the gunpowder and for night assaults when the lighted match of the "matchlock", would give away a soldier's position. It was estimated that a musketeer could used two fathoms, or two metres, of match every 24 hours, so even on the march, or on sentry duty, musketeers would still be burning match even before they came within sight of the enemy. True, to save match musketeers could extinguish their match leaving just the file leader's match still alight, but this could lead to a desperate scramble from the other musketeers to light their match if the enemy were spotted. During the English Civil War a detachment of Sir Miles Hobart's Regiment of Foot at the siege of Newark in 1644, being relieved from guard duty, extinguished their match only to be cut to pieces by Royalist cavalry. Those who were not killed were taken prisoner.

Since early matchlock muskets were heavy they needed a rest to steady the musketeer's aim, but as muskets became lighter rests were discarded. To carry their gunpowder the musketeers were issued with a powder flask and a set of bandoliers, which consisted of small wooden bottles attached to a leather belt with a cord. Since there were usually 12 of these bottles they have erroneously been referred to as the "twelve Apostles", but there is no contemporary evidence for this nickname in reference to bandoliers. When bandoliers were not available the musketeers might carry their powder in cartridges, either stored in a leather bag or as George Monck suggests, "in case you have no bandoliers let there be provided for each musketeer … 12 cartridges, which they ought to carry in their right-hand pocket, and 12 bullets apiece in their pockets besides."[18]

Wallhausen, who wrote about his experiences during the sixteenth century, suggested that each regiment should have 1,600 musketeers, 1,200 pikemen and 200 halberdiers or targetiers, who carried a shield, but experiences during the "Long War" with the Ottomans had shown the need for firepower; as early as 1622 Colonel Sprinzenstein's Regiment contained

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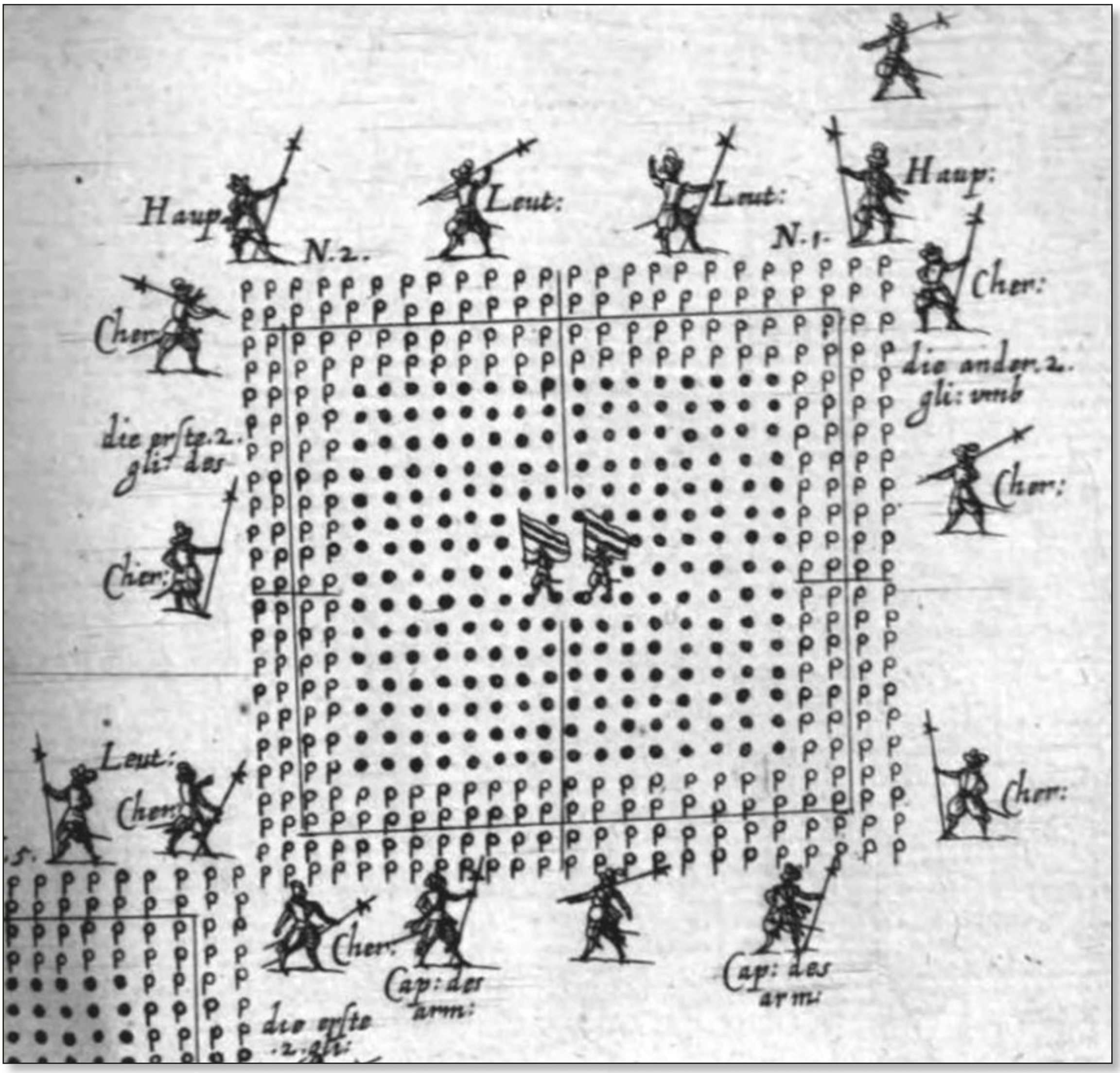
[18] Monck, *Observations upon Military and Political Affairs* (London: R. White, 1796), p.150.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Example of infantry unit, with placement of officers and NCOs.
Johann Jacobi von Wallhausen, *Kriegskunst zu Fuss*, 1615.
(Michał Paradowski's archive)

874 musketeers and 400 pikemen, being a ratio of about one pikemen to 2.2 musketeers, and Florainville's Regiment also had 1,400 musketeers and 600 pikemen, which was also a ratio of about 2.2 musketeers to one pikeman. When Pappenheim raised his regiment in 1627 1,500 muskets, 300 pike and 350 halberds were supplied to him by the Bishop of Würzburg, a further 1,000 muskets came from the city of Strasbourg and a 200 muskets and 700 pike came from other sources, or a total of 2,700 muskets, 1,000 pike and 350 halberds or ratio of two musketeers to every pikeman/halberdier. Not all regiments had this ratio: in 1627 the Duke of Holstein's Regiment had 1,361 musketeers and 327 pikemen.[19] Regiments armed with only muskets were also known, for example Colonel Herman Franck's Regiment of Foot which served with the Bohemian Army and in July 1619 was described as "1,500 Hollander musketeers of Colonel Franck".[20]

On 17 July 1621 Maximilian ordered the delivery of one partizan, five commanders' halberds, one drum, 100 soldiers' armour, 80 long pikes, 200 muskets with bandoliers and powder flasks, 50 musket ball flasks, 20 common halberds and 202 coats to Herbersdorf for his regiment. During the summer of 1631 Otto Fugger obtained 700 muskets with rests for his regiment from Jakob Banz and Hans Roth, Augsburg weapons dealers, as well as 1,000 bandoliers, for 3,200 gulden. Roth also supplied 80 sets of pikemen's armour for 164 gulden. The city's armoury also supplied 950 muskets with bandoliers, 700 long pikes, 180 halberds and some partisans, 600 sets of armour and 17 drums for 7,200 gulden.[21]

Dragoons were organised along similar lines to the infantry regiments having the following contingent of officers in each company:[22]

German Ranks	English Ranks
1 Hauptmann	Captain
1 Leutnant	Lieutenant
1 Fahnrich	Ensign
1 Feldwebel	Sergeant Major
1 Musterschreiber	
Fourier	
Wachtmeister	Sergeant Major
Fahnenjunker	
Feldscherer	Surgeon
3 Korporale	Corporal

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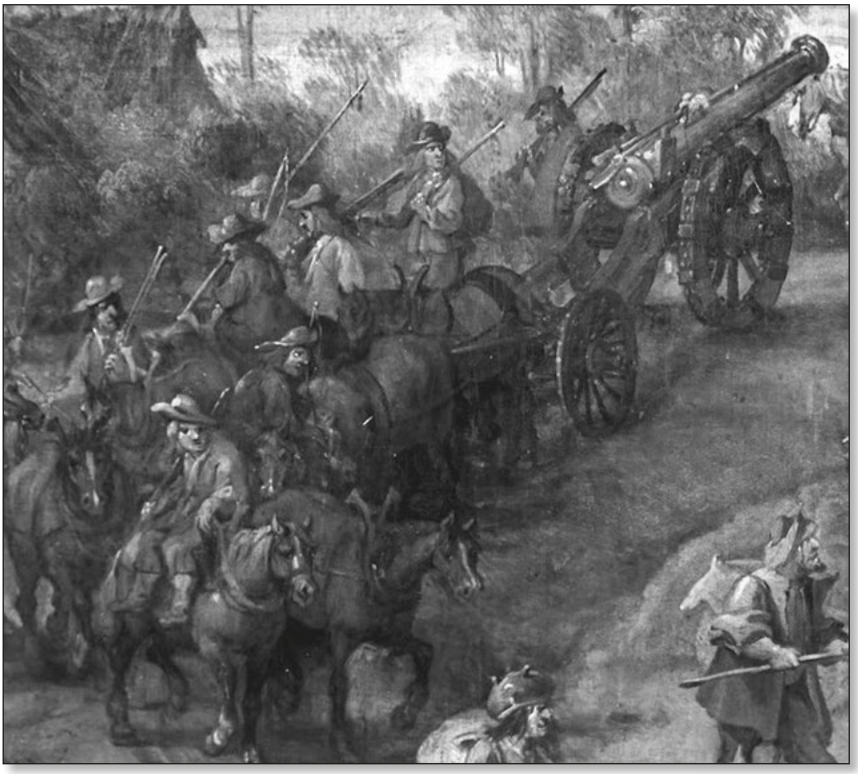
[19] Dr Hans Wertheim, *Der Tolle Halberstädter: Herzog Christian von Braunschweig im Pfälzischen Kriege 1621–1622*, 2 vols (Berlin: Internationale Bibliothek, 1929), vol. 1, p.112; Stadler, pp.210, 249–250; <Kriegsbuch.blogspot.co.uk> (accessed December 2015).

[20] Bavarian Archives KAA no. 2329, p.147.

[21] Stephanie Haberer, *Otto Heinrich Fugger (1592–1644): biographische Analyse typologischer Handlungsfelder in der Epoche des Dreissigjährigen Krieges* (Augsburg: Wissner, 2004), pp.339–340.

[22] Sennewald, p.595.



Artillery on the march. Pieter Snayers. (Michał Paradowski's archive)

However, an army would not be complete without its train of artillery, which not only included its pieces of ordnance and gun crews, but also support wagons which carried the gunpowder and shot, not only for the artillery but also for the rest of the army. In 1622 the Bavarian Army's train of artillery contained 129 wagons and 568 horses, including 28 wagons to carry 512,500 musket shot, 16 wagons for 160 cwt of gunpowder and 33 wagons for 330 cwt of match. There was also a petard wagon, a wagon to carry 555 shot for the two falconets, and two wagons to carry the 72 mortar bombs for the army's three mortars. In addition there was an army of artisans, carpenters, blacksmiths, wheelwrights etc., all of which were needed to repair the artillery pieces and the wagons if necessary.[23]

According to the Sieur Du Praissac there were six calibres of artillery: the cannon, the culverin, the bastard culverin, the minion, the falcon and the falconet. One of the largest guns, the culverin, fired a shot weighing 15.25 pounds, which needed 10 pounds of gunpowder per shot and was served by two cannoniers, two extraordinary cannoniers and 24 pioneers who were able to fire it about 10 times an hour. However for this rate of fire it needed three wagons pulled by 12 horses per day, which does not include the number of horses needed to pull the piece itself. The smallest piece, the falconet, could be fired 20 times per hour and fired a 0.75 pound shot. It was served by one cannonier and four pioneers and a wagon, which was pulled by a horse. The wagon could carry enough ammunition and powder to last it for three days if it was in constant use.[24]

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[23] Heilmann, vol. 2, p.953.

When the Swedish Army occupied Munich, according to Monro:

> Before his Majesty [Gustavus Adolphus] coming, by the Duke's Command the great cannon were buried side by side in the magazine house, whereof his Majesty being much acquainted there were digged [*sic*] up out of the ground and carried away to Augsburg, above one hundred and forty pieces of cannon, great and small, whereof there were twelve Apostles and other cannon which formerly were taken from the elector Palatine and the Duke of Brunswick, with their names and arms on them.[25]

An inventory was taken dated 12 August 1634 of the guns in Bavarian armouries, and mentions seven of these "twelve Apostles", so Gustavus must have only taken five of them. Those remaining guns were engraved with the names "St Andreas, Mathias, Simon, Jakob minor, Thomas, Jakob major and Paulas". Underneath these names were engraved the arms of Maximilian of Bavaria.

Others guns were called after animals, the "Steinbock" (wild goat), "die Lowen" (the Lion), and the "Storchen" (the Stork); or other names such as "Die wilde Mann" (the wild man) and "die wilde frau" (the wild woman), both of which had been captured from the Brandenburg Army. On 27 September 1622 it was reported that Maximilian had ordered these two guns to be transported from Amberge in the Upper Palatinate to Munich. Six whole cannon and some demi-cannons were also sent from Mannheim to Munich.[26]

Other pieces mentioned in the inventory had the head of state's monograph, their coat of arms or an inscription engraved on them with the date they were cast. It is usually believed that it was Gustavus Adolphus who introduced regimental guns, but this inventory also includes an entry for "short Danish regimental pieces, 14 of seven and 12 pounds", which were possibly captured at the battle of Lutter in 1626, certainly no later than 1629 when Christian IV of Denmark made peace with Ferdinand.[27]

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[24] Du Praissac, *The Arte of Warre*, pp.118, 121.

[25] Monro, part II, p.125.

[26] *A Continuation of the Weekly News*, 27 September 1622 p.5; *Weekly News* 28 January 1623, No. 15, p.2.

[27] Heilmann, vol. 2, pp.964, 966.

4

The Bavarian Militia

Although the concept of militias date back to ancient times when citizens were embodied to defend their homeland, the Bavarian militia, like those of Silesia and Austria, dated back to the Hussite Wars of the 1430s, while the Dutch militia dated back to at least the early 1530s. According to tradition it was not until 1573 that England formed its own "trained bands" for local defence. It was seen as a cheap option, to have a nucleus of trained soldiers which could be called out in case of emergencies, rather than needing to hire mercenaries. Niccolo Machiavelli argued that mercenaries "are useless and dangerous … [since] they are disunited, ambitious, without discipline, faithless, bold amongst friends, cowardly amongst enemies."[1] In 1621 Johann von Wallhausen published his *Defensio Patriae oder Landrettung* (Defence of the Fatherland or Civil Rescue), which he dedicated to Emperor Ferdinand II; he also argued in favour of a militia over a mercenary force, in that the militiaman would only be paid when his company was "embodied" unlike the mercenary who had to be paid annually. However, writing at the end of the sixteenth century the Flemish philosopher Justus Lipsius lamented that the militia of his time compared little with the discipline of that of ancient Rome, complaining that they "rarely go to war and so remain sometimes at home, and are occupied about other matters … moreover, the common sort of tradesmen … are unfit for war."[2]

It was not just the rank and file who made poor soldiers, but the officers too. Machiavelli recalls that, "mercenary captains are either very capable or not; if they are you cannot rely on them, for they will always aspire to their own greatness, either by oppressing you, their master, or by oppressing others against your intentions; but if the captain is not an able man, he will generally ruin you."[3] Unfortunately he does not elaborate on this last comment, but writing in 1639 about the trained bands in England, Robert Ward states that some men became officers:

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[1] Machiavelli, Niccolo *The Prince* (London: Oxford University Press, 1909) translated into English by Luigi Ricci, chapter XII.

[2] Justus Lipsius, *Sixe Bookes of Politickes or Civil Doctrine written in Latin by Justus Lipsius done into English by William Jones, Gentleman* (London, 1594), Chapter XI, pp.144, 150.

[3] Machiavelli, chapter XII.

> for wealth's sake … [who] neither have courage, skill, nor delight in arms themselves, nor discretion to command others; but I hope of these not many, yet if any, it is too many; for how can we hope to make our people soldiers, when they be under blind and ignorant guides; *If the Blind lead the blind* … [moreover] we will not commit the teaching of our children to a dunce, and what reason is there we should commit the leading of our soldiers to such a one?[4]

Unfortunately the Germanic States, including Bavaria, did not commission portraits of themselves, although there was a Dutch school of painting: for example Captain Frans Banning Cocq commissioned Rembrandt to paint his militia company in 1642. The painting is now known as *The Night Watch*, although this is a title attributed to the painting later, since its has a dark background. Another Dutch painter, Franz Hals, painted the Haarlem company in 1627, and again in 1639. For the Bavarian militia we have to rely on descriptions to give us an idea of what they looked like, for example in 1619 Senior Captain Schottl mustered the companies of Pfaffenhofen, Rain, Schrobenhausen, Dietfurt, Kelheim, Eggmuhl, Landau, Teisbach, Erding, Rosenheim and found that their rapiers, belts and hangers were consistently in a poor condition, and some soldiers' rapiers were short and bent. The leather flasks in which they held their gunpowder were in poor condition and their bandoliers broken.[5]

Despite having its origins in the 1430s, in 1594 Maximilian formed the *Landesfensionswerk* and the following year each Bavarian district had to raise a company or *Landfahnen*, although despite the name these were the size of weak regiments. Thanks to his reforms Bavaria would have the strongest militia of all the Germanic states, mustering 41 rural and four civic regiments.

In 1614 Upper and Lower Bavaria were divided into the following companies:

Munich	800 men
Landshut	377 men
Straubing	288 men
Ingolstadt	357 men
Wemding	484 men
Furt	448 men
Total	2,754 men

As for the cavalry, in 1610 there were 11 troops of horse, unfortunately the colours of only three cornets are known: Captain Friedrich von Closen of Haidenburg's and Captain Hans Adolf Tattenbach's troops carried red cornets, while Captain Hans Christoph von Nussdorf's troop carried a white cornet.[6] By 1615 the number of troops had risen to 15 and mustered 1,500 troopers, although not all the troops were the same size, with two in theory mustering 86 troopers, while another mustered 130. Between three and 10 cities or towns were grouped together to form a troop, each required to raise a certain number of men, for example Munich was ordered to raise 17 troopers, while Gerolfing was to supply just one. However, the heaviest burden of raising men did not always fall upon the largest city, for example in the same troop as Munich was Bohburg which was required to supply 21 troopers and Ingolstadt was to raise just seven men. In all this troop was 92 troopers strong.[7] In September 1607 several troops were said to be wearing "livery coats", which would suggest uniformity.[8]

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[4] Robert Ward, *Anima'dversions of Warre: or a Militarie Magazine of the truest rules and ablest instructions for the managing of war composed of the most refined discipline* (London: John Dawson, 1639), p.32.

[5] Heilmann, vol. 1, p.246. The clothing of the militia will be discussed in the following chapter.

[6] Heilmann, vol. 2, p.815.

In 1618, in addition to these civic guards there were also 33 militia companies or *Landfahnlein*) which further increased between July and November of that year when Colonel Hannibal von Herliberg raised more militia companies and Colonel Engelbert von Bonninghausen raised an additional six troops.[9]

Therefore upon the outbreak of the Thirty Years' War Maximilian could call upon a total of 15,314 trained infantry, and by 1622 this had increased to 15,948 men in 41 companies, which was divided into 5,974 pikemen, 6,245 musketeers, 2,715 armed with fowling pieces or rifled muskets, 649 armed with halberds, 231 armed with battle swords and 134 armed with round shields or targets. Soldiers armed just with broadswords or targets appear to have been unique to the militia companies, although officers are sometimes known to have carried targets. Not all the companies were armed the same: the Munich guard had 800 musketeers, but by 1641 this company had been re-equipped so that now it had 400 musketeers and 400 pikemen, plus 29 armed with halberds; whereas Dachau had 208 pikemen, 180 musketeers, 20 armed with a halberd, 10 swordsmen, and 102 armed with a fowling piece or rifled musket. The only change in 1641 was that there were now 103 riflemen (a more correct term would be Jäger). Other companies also had five men armed with targets.[10]

In an emergency like this the local population could be conscripted to support the militia. In 1614 a muster was held for those who were suitable to serve in the militia which found the following:[11]

City	Chosen	Not chosen
Munich	5,308	49,335
Landshut	3,293	31,737
Straubing	1,684	16,274
Burghausen	2,275	21,151
Total	12,560	118,497

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[7] Heilmann, vol. 2, pp.819–820.

[8] Heilmann, vol. 2, p.810.

[9] These were from Burghausen, Eggenfelden, Straubing, Reid, Osterhofen, Schongau, Kotzting, Traunstein, Teisbach, Haag, Aichach, Wolfrathshausen, Freidberg, Erding, Fridburg, Eggmuhl, Kelheim, Scharbing, Oetting, Pfarrkirchen, Moosburg, Rosenheim, Hengersberg, Abensberg, Dietfurt, Landsberg, Landau, Wasserburg, Braunau, Tolz, Dachau, Stadtamhof and Pfaffenhofen. Heilmann, vol. 2, part 2, pp.820–21.

[10] Heilmann, vol. 2, pp.824, 1079, 1081.

[11] Heilmann, vol. 2, 819.

Although designed for home defence, in 1601 2,100 Bavarian militiamen took part in the "Long Turkish War", but in October 1618 Engelbert von Bonninghausen mustered six troops from Strauberg, Vilshofen, and Landshut and the companies from Tattenbach and Nussdorf to assist in the fight against Frederick V. These were followed by a further four troops of horse and six companies of militia which were called out in October and November 1620. In 1621 four militia companies of foot and two troops of horse reinforced Tilly's army in the Palatinate because Maximilian had withdrawn some of Tilly's regiments to form a second army. This detachment of militia was quartered between Bradlawka and Radbusa, while a further seven companies were in Rosshaupt at the beginning of September 1621. There seem to have been 11 companies and four troops of the militia serving in the Palatinate campaign or a total of 3,500 infantry and 1,000 cavalry. Likewise the Bavarians would have had to deal with the Palatinate's militia, which was also called out to meet the threat of invasion.[12]

The next time the militia was called out was after Tilly's defeat at the battle of Breitenfeld in 1631, when he recommended to Maximilian that the militia should be embodied for the defence of Bavaria. In November 2,227 men were to be sent to reinforce the garrison of Ingolstadt, 2,317 men to Donauwörth, 780 men to the towns of Hof and Osterhofen and 1,692 men from the militia companies of Hengersberg, Osterhofen, Teisbach and Eggenfelden to Strauberg.[13]

On 4 April 1632 Maximilian ordered that "since the enemy is getting closer from day to day and it is assumed that in addition to those already selected the remaining peasants and citizens are sufficiently courageous and eager to protect their wives, children and their homeland to the best of their ability". In the event of an invasion the church bells were to be rung and beacons lit, to warn the civilians to meet at their chosen rendezvous and they were to seize bridges, waterways and other strategic positions and also to maintain a "good watch".

Despite the impending danger the Bavarian counsellor Sickenhauser, who was then at Amberg, wrote to Maximilian on 22 April 1632:

> although 3,380 men were summoned, we have got scarcely 300, because the others have nearly all run away … in Haimburg, the single men in his district have failed to report after two summons, and on the contrary declared they will leave the country rather than be drafted. Other districts report the same and we have enough to do just to prevent a general rising.[14]

Augustin Gunzter, who lived at Colmar in Alsace, was probably typical of all militiamen when his company was embodied in 1633:

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[12] J. Würdinger, 'Beitrage zur Geschichte des Bayerischen Landes-Defensionswesens unter Kurfurst Maximilian I', Bayern Akademie der Wissenschaften (1886), pp.51–52; Karl Freiherr von Reitzenstein, *Der Feldzug des Jahre 1621 mit der Besitzergreifung der Oberpltaz* (München: F Straub, 1885) p.15, 105.

[13] Würdinger, p.53.

[14] Quoted in Wilson, *The Thirty Years War: A Sourcebook*, p.229.

> I did not want to go, but I reconsidered the matter … I had to swear an oath with the other sixty citizens to serve for three months, so that when the Imperial troops invaded the countryside around Colmar … they could be driven away. In the meantime the militia encountered roughly 80 Imperial soldiers. Because the militia was much too small to resist the enemy incursion, the citizens armed another company of 100 horses. The other citizens marched out of the city with field pieces, supply wagons and flags flying to stop the enemy … However the militia was misused, and therefore I excused myself.[15]

Another militiaman's account worth quoting is that of Hans Heberle of the village of Neenstetten in the free state of Ulm, which is now part of Baden Württemberg, who in 1631 was given a choice either to enlist in the militia or have soldiers quartered in his house again. He chose to join the Neenstetten company which was ordered to reinforce the garrison of Ulm:

> On the 22 day of April the militia from the entire countryside had to present themselves on account of the imperial troops, who were coming from foreign lands and wanted to attack the Evangelical alliance [Protestant Union] … The 10th day of June we, as the militia, once again had to come to arms and were called to Ulm to the armoury courtyard, And they wanted to make us into real soldiers, for there we had to swear loyalty to the troop, and they read aloud to us in the strongest possible terms all the articles of war. Then we had to stand with our hands raised and promise to comply with them, as is traditional in war. After this we were transferred to the Gansbau. There several tents were pitched and we were given rations, beer and bread.[16]

Although Ulm surrendered to the Imperialist troops in July, Heberle was called upon several more times that year to repel soldiers from the surrounding territory.

Finally seeing that conscripts were of little use Maximilian issued a mandate on 10 December 1632 stating that "experience has proved that conscripting of subjects is of no use whatsoever, and that any expenditure on them is nearly futile and a waste".[17] Instead those inhabitants who would have been conscripted were to pay a tax of three Imperial thalers, which was to be used to pay towards the defence of Bavaria. Those too poor to pay this sum were not to be conscripted, but despite this conscription continued to be used to reinforce Bavaria's regiments.

Since large parts of Bavaria were occupied by the Swedish Army in 1632 the number of companies were reduced to 29, in addition to the four civic guard companies, which reduced the number of the militiamen available to Maximilian from 16,000 to 10,333 men. It was not until 14 August 1637 that 17 towns were ordered to raise their companies again, which had not been embodied since 1632. Towns whose lands had been badly affected by the

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[15] Quoted in Hans Medick and Benjamin Marschke, *Experiencing the Thirty Years War, a Brief History with Documents* (Boston: Bedford/St Martins, 2013), pp.77–78.

[16] Helfferich, p.311.

[17] Helfferich, p.230.

Swedish invasion were given more time to raise their companies, and from 1641 there were 40 companies, which was one less than the 1622 level, but on paper gave Maximilian 15,553 men.[18]

It was also ordered in 1637 that shooting practise should be reintroduced on Sundays and public holidays and that the ratio of muskets to pikes should be increased, and where possible halberds should be used instead of pikes. However, despite this order pikes were still being used in great numbers.[19]

On 17 November 1641 its was decided to unite all those militia men armed with rifled muskets and fowling pieces into one body, which was sent to Munich to be inspected by the *Oberstjägermeister*, but it was not until 14 November 1642 that a Jäger regiment was formed. It was commanded by *Oberstjägermeister* Count William von Hohenwaldeck and was to be used for the defence of Bavaria, and served in the campaign along the Danube.[20] By 1645 a further 32 companies had been raised which on paper mustered 12,137 men, but there were not enough rifled muskets so many men were issued with smoothbore muskets.[21]

Unlike Maximilian's field armies the militia was not disbanded after the war, and continued to be called upon in emergencies until early in the twentieth century.

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[18] These were Wasserburg, Braunau, Burghasen, Traunstein, Rosenheim, Oetting, Erding, Friedburg, Reid, Haag, Schongau, Tolz, Pfarrkirchen, Eggenfelden, Hengersberg, Kotzting and Furth.

[19] Heilmann vol. 2, part 2, p.1081.

[20] Heilmann vol. 2, part 2, p.861.

[21] Heilmann vol. 2, part 2, p.832.

5

Clothing the Soldiers

Anton Gindely, writing during the 1880s in his *History of the Thirty Years War*, states that "there was no symmetrical uniform at the time of the Thirty Years War, neither in colour nor in cut of the garments … [since], with the solitary exception of France and Holland, no provisions were made for the army's needs."[1] This view has been repeated by many historians who believe that a soldier had to equip himself with clothing and weapons at his own expense and so there was no uniformity. Another myth often repeated, is that Tilly said that he preferred a ragged soldier as long as they had a clean musket. However, both views are incorrect, since there is no contemporary evidence to suggest that Tilly ever said these words and far from the soldiers supplying their own clothes, receiving clothing was one of the reasons why they enlisted. This is not to say that the colour of the soldiers' clothing did not change from issue to issue nor that an entire regiment was uniformed the same.

It is sometimes claimed that Wallenstein introduced clothing to the regiments of the Imperialist Army, but this is also incorrect: in 1619 we find that Otto Heinrich Fugger paid Wolf Seidel, an Augsburg tailor, 4,580 gulden for an unspecified number or colour of "Schutzenrocke" to clothe his regiment.

It was also reported on 4 October 1622 that the soldiers of the Marquis de Montenegro, "soldiers returning from Hungary, Moravia and Silesia were so tattered, torn and in a manner of countenance, when they came to civil places that he was compelled to take order for the new arming and apparelling, [of them], dispersing great sums among them for their further satisfaction". [2]

Neither did the supply of clothing dry up after Wallenstein's assignation in February 1634. On 13 January 1637 2,021 coats of "coarse cloth" and lined, 3,018 pairs of shoes and 3,000 pairs of stockings were delivered to Adjutant General Count Ernest von Königseck and on 19 January 1642 Count Rudolf Colloredo wrote to Hatzfeld asking that clothing be sent to Cologne for his men. In 1642 the Swedes captured an "abundance of soldiers' coats and other provisions" from Piccolomini.[3]

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[1] Anton Gindely, *History of the Thirty Years War* (London: Richard Bentley and Son, 1885), translated by Andrew Ten Brook, vol. 2, pp.391–392.

[2] *A True Relation of the Affairs of Europe*, 4 October 1622.

In 1620 an English volunteer at Delft wrote, "we mustered for the King of Bohemia and was billeted there for three weeks, where we had our apparel, our hats and Colours with our arms given to us". Some recruits would desert once they had received their clothing, which prompted Sir Dudley Carleton to recommend in regard to the English soldiers being sent to the King of Denmark, that their 'clothes [were] not to be delivered till they come to' Harwich where they were to embark. In another letter, this time dated 20 August 1628, Carleton informed Lord Conway, "The soldiers will hardly be drawn to return to the King of Denmark's service … Their clothes are not yet provided nor will they be ready this month yet … The clothes [are] not to be delivered till they come to the place of service."[4]

This did not mean that their clothes did not wear out. In 1637 Maximilian of Bavaria wrote to the Emperor concerning the Bavarian Army, "the largest part of the cavalry marches on foot. The unfortunate soldiers are destitute, ragged, naked, worn out, starving and in such shape that we must in fairness commiserate with them. A period of recovery is urgently needed if it is planned to use the troops again next spring."[5]

Other references to clothing being made for the soldiers include George Ayermann of Nuremberg who supplied Colonel Wolfgang Count von Mansfeld with 2,400 coats for his Imperialist regiment in 1625, and in November 1628 Johann Wangler's Regiment of Foot was issued with clothing and shoes, but the quantity is not recorded.[6]

Outer clothing, such as coats and breeches, were usually made by tailors in their own workshops. However, to increase their production Gustavus Adolphus planned to set up a magazine or factory, which was to employ between 40 and 50 tailors to make army uniforms. Unfortunately, it is not known whether he did so since the records for this period do not survive, but during the English Civil War King Charles I did set up a similar factory in the Music School and the Astronomy School at Oxford University and another factory in Reading, to produce clothing for the main Royalist Army. So these types of factories were known at this time.[7]

Once the clothing was made it would be taken to an appointed magazine where it would be checked to see if it had been made correctly. There is some evidence to suggest that the clothing may have been made according to a relevant pattern, certainly the clothing issued to English troops in the 1620s was made to a pattern in the Royal Wardrobe; in there also is a hat said to be the pattern worn by Queen Christina's infantry during the latter part of the War. Unfortunately for Maximilian, in 1632 his magazines at Würzburg and Munich fell into Swedish hands, and the coats were distributed amongst Gustavus' Adolphus' army.

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[3] LVR-Archivberatungs und Fortbildungszentrum, Schonst 121, Count Ernest von Konigsbeck to Field Marshal Hatzfeldt, 13 January 1637, and Schonst 172, Count Rudolf Collerado to Hatzfeldt, 19 January 1642; BL, TT E 107/7, *News from Foreign parts July 1642.*

[4] *A Relation of the passage of our English Companies from time to time* p.2; BL, Add MS 18981 f.45; Geoff Mortimer, *Eyewitness Accounts of the Thirty Years War, 1618–1648* (Basingstoke: Palgrave Macmillan, 2002), p.18; TNA, SP 101/75 f372; SP 101/47, Sir Dudley Carlton to Lord Conway, 20 August 1628, f.86.

[5] Redlich, p.475.

[6] Heberer, p.338.

[7] Erik Bellander, *Dräkt och Uniform: den Svenska arméns beklädnad från 1500- talets början fram till våra dagar* (Stockholm: Norstedt & Soners, 1973), p.588; David Hopkins and Hilary Hopkins, *The Tale of a Soldier's Coat, the story of the experimental reconstruction of a 1643 Oxford Royalist soldier's coat* (Stuart Press, 2000), p.5.

As one can imagine, fashion changed considerably over 30 years and varied from country to country. In February 1607 William Calley was to supply 6,000 "suits" and Francesco Sarra, an Italian merchant, was to supply 3,000 to the Spanish infantry. The cassocks and breeches, or hose as they were often called, were to be made of "Reading cloth made large after the Spanish fashion". He was also to supply a doublet made of fustian cloth. The cassocks were to be:

> [lined] with good bayes, faced broad in the collar with rich taffeta and edged in the seams with the same. The doublet in the like manner and hose and lined with very good and strong linen and very fairly trimmed with buttons of silk at least 22 dozen of like button are employed in the trimming of the cassock, hose and doublet.

The soldiers were also to receive cloth stockings, "large and long" and a pair of "neats leather shoes with three soles". The clothes were to be ordered in June or July each year and delivered in October or November so that they could be distributed to the soldiers "in the winter time when their [*sic*: they] return out of the field into garrison". However, only the Spanish, Italian, English, Scots and Irish soldiers were to receive this clothing, the German and Walloon troops and the cavalry were to receive cloth to the value of one month's pay to make their own clothing. The doublet mentioned in this report is similar to one which was preserved in the Berlin Armoury, but believed destroyed during the Second World War. This was a short coat with a stand-up collar and about 18 buttons down the front. The doublet also has wings which have about 11 pieces of lace, and lace is also visible along the seams of the coat but not the sleeves.[8]

When it came to the coats and breeches issued to the guard of the Elector of Brandenburg in 1620, they were to be made of five ells of a "good blue" cloth, plus five ells of an unspecified colour for the lining and 12 ells of white, black and red stiff ribbon. The coats and breeches were to have six dozen bows and three dozen iron buttons, plus a hat, plus one ell of thread to trim the cassock.[9]

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[8] Swedish Army Staff, *Sveriges Krieg, Bilagsband 1611–1632* (Stockholm: V. Petersons, 1936). Black and white plate opposite, p.139. Unfortunately the photograph only shows the front of the coat and so it is uncertain if there was any lace on the back. Also a set of bandoliers obscures some of the buttons so the number 18 is an estimate, as is the number of laces on the wings.

[9] A.C. von der Oelsnitz, *Geschichte des Königlich Preussische Ersten Infanterie-Regiments* (Berlin: E.S. Mittler and Son, 1855), pp.18, 20.

In 1627 Phillip Burlamachi estimated that to clothe each English soldier would cost:[10]

Large cassock and hose, 2 yards and a half at eight shillings	20s
Cotton to line the cassock, 2 yards at 2s 6d the yard	3s
Lining for the hose either leather or linen	2s 6d
Making with buttons	4s
10 dozen buttons to each cassock and hose at 2d the dozen	1s 8d
Silk [thread] for button holes	8d
[Total]	31s 10d

In 1626 two thirds of the coats ordered to be supplied to the Swedish Army were to be large and the other third small. In 1633 the Swedish allowed an average of five ells of cloth per soldier, the same amount as for the Elector of Brandenburg's guard. During the 1640s the French Army supplied the clothing to its soldiers in three sizes: small, large and regular.[11]

The accounts for the Swedish regiments at Stralsund in 1630 show the regiments being issued with cloth rather than clothing so that they could make their own coats and breeches, including Alexander Leslie's regiment which was issued with cloth to the value of 9,464 thaler 34 kr; Robert Leslie's Regiment received 1,000 ells of cloth costing 1,000 thalers, whereas Colonel Hall's Regiment of Foot was issued with 4,270 ells of cloth at a cost of 5,207 thalers 24 kr. Presumably the difference per ell between Leslie's and Hall's regiments was due to the colour of the cloth. Stockings and shoes were also issued to the regiments within the garrison, which was in the Swedish service. These accounts also show that the regiments of Metstacke, Dubattles and Hastfehr also received furs, no doubt to keep the soldiers warm and dry while on guard duty.[12] In a different order dated 1 November 1631 Robert Bremer of Brandenburg was to supply 500 suits of clothes, 500 pairs of stockings, 500 pair of shoes and 260 Monmouth caps to the Scottish Regiments in Swedish service, although only 360 pairs of stockings seem to have been delivered.[13]

Unfortunately none of the above accounts mention the colour of the cloth the regiments received, but on 4 October 1627 Sir James Spence wrote:

> For clothing his [Gustavus Adolphus] army he hath coarse cloth made in his country and though it be coarse yet it is warm for winter, it is at 2 shillings sterling … with this he clothes his common soldiers causing to dye it a red, yellow, green

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[10] J.V. Lyle (ed.), *Acts of the Privy Council of England 1627*, Estimate of the charge of clothing the soldiers, 31 March 1627, p.194.

[11] John Lynn, *Giant of the Grand Siècle: The French Army, 1610–1715* (Cambridge: Cambridge University Press, 1977), p.177.

[12] During the English Civil War sheepskins were issued for the same purpose.

[13] National Archives of Scotland, GD406/1/234.

> and blue which makes a great show in the field and this never was done before this king's time.[14]

In 1631 the merchant Hans Barkhausen was contracted to buy 20,000 ells of cloth for the Swedish Army, preferably blue, although red or brown cloth was acceptable if he could not find enough of the former.

On 6 July 1624 a warrant to pay Philip Burlamachi £17,280 was issued, for clothing and arming 6,000 foot for service in the United Provinces, and in 1625 George Hooker was paid £6,666 13s 4d for 10,000 cassocks 'of good strong broad cloth' for Mansfeld's soldiers raised in England. Since the soldiers would have already received a coat from the county where they were raised, cassocks appear to have been more of an overcoat.[15]

Unfortunately, warrants for clothing do not often mention the colour of the clothing being supplied, since accountants usually care how many coats etc. were supplied and their cost rather than the colour. An exception to this is some Swedish accounts in 1620 which record that the Småland Regiment of Foot was issued with 350 red jackets, 100 yellow coats with blue facings went to the Västgöta Regiment of Foot with 350 yellow coats to the Östergötland Regiment, while the Uppland Regiment of Foot received 250 yellow coats with black facings. Each company was to be clothed the same.[16]

However, eyewitness accounts sometimes also fill this gap in our knowledge, for instance Israel Hoppe, who served with the Swedish Army in Poland mentions "the German yellow coats" and "the Swedish bluecoats under Count von Thurn's Regiment". Colonel Maximilian Teuffel is also mentioned as having "four companies of bluecoats", and there were also "four companies of redcoats of Colonel Hohendorf's [Regiment]." Colonel Ehrenreiter's Regiment is also described as having red coats, with Colonel Hans Nohten being a regiment of "bluecoats". Ehrenreiter's (which later became Hohendorf's) and Nohten's Regiments were known as the Red Regiment and the Blue Regiment respectively, Teuffel commanded the Blue Regiment, before being appointed the commander of the Yellow Regiment and it is his former regiment that Hoppe is referring to.[17]

Several eyewitness accounts of the battle of Breitenfeld in September 1631 record of the Swedish Army, "the greatest part of the [foot] soldiers were clad in blue and yellow jackets". Certainly the Blue and Yellow Regiments of the army are known to have worn these coloured coats as well as carrying the same colour ensigns, but this would suggest that Gustavus Adolphus' other "colour regiments" – that is, the Red and Green regiments – wore the same coloured coats as their regimental colours.[18]

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[14] TNA, SP 95/2, Sir John Spence relations of affairs in Sweden, 4 October 1627, f.179.

[15] TNA, SP 81/33, Note of money paid to Mansfeld, 1625, f.257.

[16] Bellander, pp79–80.

[17] Israel Hoppe, ed. Dr M Toeppen, *Burggrafen zu Elbing, Geschichte des Ersten schwedisch-polnishen Krieges in Preussen: nebst Anhang* (Leipzig: Dunker and Humblot, 1887), pp.112, 138, 141, 230, 247, 270, 417, 469.

[18] Count Galeazzo Gualdo Priorato, *An history of the late warres and other state affaires of the best part of Christendom beginning with the King of Swethlands entrance into Germany, and continuing in the yeare 1640*. Translated by Henry Carey Earl of Monmouth (London: W. Wilson, 1648), p.42.

Wallenstein also received 1,000 ells of light blue cloth, 300 ells of carmine red and 100 red pairs of stockings from England via Amsterdam, probably to clothe his own regiment since red and blue were his livery colours. In about 1630 a resident of Hagenau complained that he had been plundered by Colonel Collalto's blue coats, Schaffenburg's yellow coats and an unidentified militia regiment of red coats from Ortenau. This was Collalto's Life Regiment which served throughout the war, but whether it wore blue coats throughout is not known. Another blue-coated regiment within Wallenstein's Army was Colonel Julius Hardegg's, whose coats were faced red. In 1645 Count Mathias Gallas ordered clothiers to supply pearl grey cloth for uniforms for his regiment of foot.[19]

In 1621 there were about 35 cloth mills at Reichenberg, but when Wallenstein became the town's owner he established 76 new cloth mills between 1622 and 1634. After his death these passed to Gallas and continued to supply cloth to the Imperialist war effort. Under Gallas the number of clothiers appears to have increased from 20 between 1635 and 1637 and there were a further 28 between 1638 and 1645. In 1628 these mills were producing blue, red, black and grey cloth in two widths, 2.5 and 2 ells. Cologne and Aachen are also known to have supplied clothing to the Imperialist and other armies.[20]

In 1620 the musketeers in at least one regiment in the Danish Army, the King's Own Regiment, were to have light blue coats with white edging, while the Red Regiment in Christian IV's service had red ensigns along with red coats with red, blue and yellow breeches.[21]

In April 1623 the King of Denmark requested 1,000 pieces of English cloth to clothe his soldiers. In March 1629 Burlamachi was ordered to be paid £7,000 to buy coarse cloth for the Danish Army, whilst the English government also paid 45 shillings per suit for each soldier who enlisted in the Dutch Army in July 1624. The clothes and arms were to be issued to the men after they had landed in Holland.[22]

In 1620 the Schlieben and Goldstein regiment of the Army of Saxony had red and yellow coats respectively. Colonel Loser's Regiment of Foot wore blue and white coats and the Life Regiment of Foot in the Army of Saxony also wore blue coats. In 1631 the Army of Saxony was issued with the following uniforms:

Loser	Red and white coats
Klitzing	Blue and red
Starschedel	Black and yellow
Schwalbach	Red and yellow
Frei Company	Blue and yellow

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[19] Anton Ernstberger, *Hans de Witte, Finanzmann Wallensteins* (Wiesbaden: Steiner Verlag, 1954), p.287; August Hanauer, *La Gueere de Trente Ans à Haguenau* (Colmar: H Hufel, 1907), pp.138, 138, 175; Geoffrey Parker, *The Thirty Years' War* (London: Routledge and Kegan Paul, 1987), p.192.

[20] Joseph Grunzel, 'Die Reichenberger Tuchindustrie in ihrer Entwickelung vom zünftigen Handwerk zur modernen Grossindustrie', in *Verein für Geschichte der Deutschen in Böhmen. Beiträge zur Geschichte der deutschen Industrie in Böhmen*, no. 5 (Prague, 1893), pp.54, 56, 59.

[21] Bellander, pp79–80.

[22] Allen B. Hinds (ed.), *Calendar of State Papers Relating to the English Affairs in the Archives and Collections of Venice*, vol. 18, 1623–1624 (London: HMSO, 1912), April 1623, and July 1624; TNA, E403/2747 ff.205, 211, 224; TNA, E403/2606.

Presumably the second colour mentioned is the facing colour. In 1633 one eyewitness referred "200 blue coats" of the Elector of Saxony's Life Regiment, which was still in blue coats in March 1643. In 1635 another eyewitness referred to Schleinitz's Regiment, which had been Loser's Regiment, as being in red and white coats. Therefore since the regiments were meant to receive clothing each year they appear to have kept the same coloured coats, even when a new colonel was appointed.

During the 1640s Le Tellier purchased clothing for the French troops costing from 10 livres 6 sols to 13 livres 13 sols. During the siege of La Rochelle in 1627–1628, Paris was ordered to provide 2,500 outfits for King Louis XIII's Guard and in 1647 the city supplied a further 1,600 suits of clothing. Each town and city was to provide the French regiments with clothing. This practice continued in Germany when the city of Ulm was ordered to supply 1,000 grey coats and 1,000 pairs of shoes to the French Army under Turenne, although he had demanded 4,000 of each.[23]

Smaller states also appear to have adopted uniform colours. As already stated, in 1620 the guard of the Elector of Brandenburg were issued a coat, breeches and stockings of "a good blue colour", but in 1632 blue was also adopted by the 4,000-strong Brandenburg Army. By 1646 the regiments were distinguished by the following facing colours:

> Colonel Conrad von Burgsdorf's regiment, blue coats faced silver lining
>
> Colonel George Friedrich von Trott blue with yellow lining
>
> Colonel Hans George von Ribbeck's (formerly Rochow's) regiment blue with green lining.[24]

However, in June 1626 the 1,100 horse and 2,000 foot of the Brandenburg militia had red, yellow and blue and light grey clothing.[25]

When Odoardo Duke of Parma raised a small army in 1635, his regiment of foot wore green cassocks, while another regiment of horse and foot in his army wore yellow cassocks.[26]

In 1636 the Life Guard of the Duke of Brunswick consisted of 100 horse, 50 dragoons and a company of 160 foot, all of whom wore blue coats, apart from the drummers who wore grey coats, and in 1642 the Duke of Brunswick had two regiments of foot one with blue uniforms and the other yellow.[27]

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[23] Lynn, p.177; Hans Heberle, *Der Dreissigjährige Krieg in zeitgenössischer Darstellung: Hans Heberles "Zeytregister" (1618–1672)* (Stuttgart: Kommissionsverlag Kohlhammer, 1975,) pp.209–210.

[24] Curt Jany, *Geschichte der Königlich Preussischen Armee bis zum 1807*, 5 vols (Prussia: K. Siegismund, 1928), vol. 1, p.100.

[25] Oelsnitz, pp.18, 20.

[26] Gregory Hanlon, *The Hero of Italy, Odoardo Farnese, Duke of Parma, his soldiers, and his subjects in the Thirty Years' War* (Oxford: Oxford University Press, 2014), p.83, quoting a document in the Biblioteca Comunale Passerini-Landi di Piacensa Ms Pallastrelli 126, Chronicle Boselli, 109.

[27] Dr Carl von Venturini, *Amriss einer pragmatischen Geschichte des Kriegswesen im Herzogthume Braunschweig* (Magdeburg: Eduard Buhler, 1837), p.20.

But what of Bavaria? Between 1618 and 1648 Bavaria spent 2,499,473 florins and 11 krona purchasing weapons and clothing. On 8 April 1643 Bavaria re-equipped its army, buying 4,000 clothes, shirts, shoes and stockings for its infantry and coats for the cavalry at a cost of 55,000 florins.[28]

As early as 1526 one eyewitness is Nuremberg saw soldiers in grey and green coats, and during the 1590s the Bavarian nobleman Albrecht Sprinzenstein, clothed 110 musketeers in red coats faced white, with blue breeches and yellow stockings. In 1610 the city raised soldiers clothed with red coats faced white and in 1614 and 1621 blue coats faced yellow. Also in 1621 Friedrich Koler supplied yellow coats faced blue and to Colonel Johan von Leubelding red coats faced white, and Captain Backus' company received blue coats faced yellow.[29]

In 1619 when a Captain Schottl mustered several companies of Bavarian militia, their clothing was said to be torn and ragged, so the tailors were ordered "to dress them in the right manner". Unfortunately what this manner was is not specified, nor whether there was a uniform colour, although as early as the beginning of the sixteenth century the militiamen were issued with a short white coat and a hat.[30] In 1605 the musketeers wore white coats with a blue Burgundian cross and a white hat; blue and white were the colours of Bavaria and the colours of the Wittelsbach family of which the Dukes of Bavaria were part. Some paintings preserved in the St Maria della Victoria church in Rome depicting the battle of White Mountain in November 1620 show the Catholic army having large Burgundian crosses on their cassocks, from the shoulder to the bottom edge of the coat. Unfortunately it is not known who painted these pictures or when; the paintings by Peter Snayers and contemporary prints of the battle do not show these crosses, but a coat preserved in the Hermitage in St Petersburg said to date from the sixteenth century does. This is a red cassock with a white Burgundian cross on both the body of the coat and the sleeves. The sleeves are wide, and although they do not appear to be full length they must have been a hindrance to a musketeer. The cassock has a V-neck so that the musketeer could slip it over his head and no buttons are visible. The cassock is lined with white linen.[31]

In two museums, at Zwichau and St Petersburg, there are preserved two original cassocks said to have worn by the army of Saxony in about 1615. The first, at Zwichau, is red with white wavy lines down the seams of the coat and horizontal wavy lines on the sleeves with a large white cuffs. It has a white linen lining and is fastened by a hook and eye at the top of the coat. Unlike the one in St Petersburg it is open down the entire length of the front coat. The St Petersburg cassock is dark grey or black and also has white wavy lines similar to the one at Zwichau.[32] Unfortunately it is not known how this coat is fastened, but a small quantity of hooks and eyes were found in a mass grave on the site of the battle of White Mountain.

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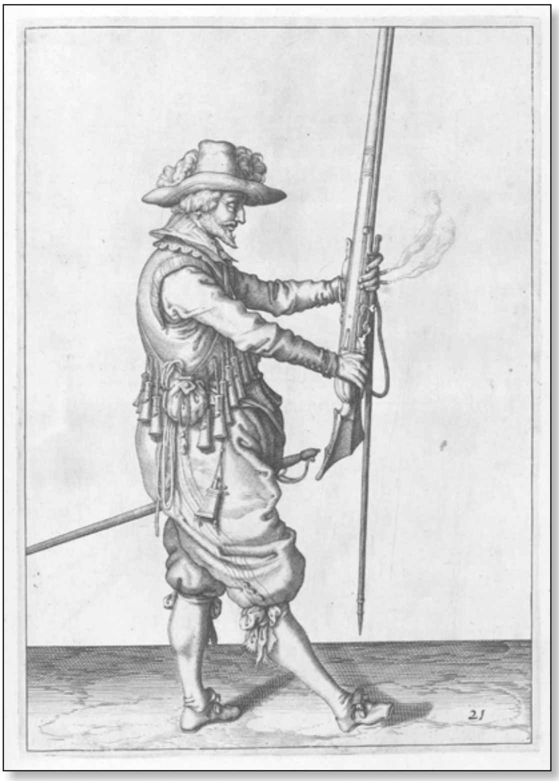
[28] Goetz, p.122; Heilmann, vol. 2, p.1022.

[29] Franz Freiherr von Soden, *Gustav Adolph und Sein Heer in Süddeutschland von 1631 bis 1635* (Erlangen: Deichert, 1865), p.48.

[30] Heilmann, vol. 1, p.246.

[31] Heilmann, vol. 2, part 2, p.808.

[32] Sennewald, pp.634–635.



Early seventeenth century musketeer, based on Jacob de Gheyn II's drawings from 1608. (Rijksmuseum)

The Bavarian militia were not the only units to wear uniforms: at the beginning of the seventeenth century the militiamen for Neuburg were described as wearing black and yellow coats in the highlands and yellow and black in the lowlands.[33] In 1607 each company of the two regiments of militia in Donauwörth were uniformed in blue, yellow, sea green, white and violet-blue.[34] The civic guard of Nuremberg were also issued with uniforms. The guard mustered 1,053 musketeers and 479 pikemen in four companies formed from masters and fellows of the city. In 1611 they wore red coats faced white, but by 1614 at least one company, Captain Dietz's, was wearing blue coats faced yellow. Four years later the "burger's" company wore blue coats with brown facings, the second had green coats faced white, the third brown coats faced yellow and finally white coats faced red. In 1621 new uniforms with the musketeers receiving red coats faced white; blue coats faced yellow and yellow coats faced blue. On 2 October 1621 two further companies were raised, but unfortunately what colour coats these companies wore is not recorded neither is the fourth company's coats.[35] As early as 1600 the militia of the Upper and Lower Palatinate also wore uniform coats, although whether they wore the same colour coats into the Thirty Years' War is unknown.[36] In 1619 the Bishop of Würzburg's militia had blue hats and blue and white coats.[37] The Jäger regiment raised by Maximilian in 1642 was to wear green coats.[38]

Cavalry could also be issued with coats. The five troops at Donauwörth in 1607 under the commanded of Colonel Engelbert von Bonninghausen were distinguished by the colour of their coats: blue, yellow, violet-blue, sea green, and white. A sixth troop were cuirassiers, and so were not issued with coats. On the other hand the garrison of Neuburg was clothed in black and yellow coats and yellow and black coats. The cavalry of Tilly's army at Breitenfeld was reported to be all mounted on "stately horses armed with strong cuirassiers richly adorned in their apparel".[39]

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[33] Heilmann vol. 2, part 2, p.839.

[34] Würdinger, p.41.

[35] Heilmann, vol. 2, part 2, p.871.

[36] The first company wore golden yellow coats faced blue; the second, blue coats faced white; third company red coats faced white; the coat colours of the 4th and 5th companies are not known. The companies numbered one to five were raised in several towns, but the 6th Company was raised in Reunburg and had yellow coats faced green; Waldmünchen, yellow coats faced black; Rötz, yellow coats faced red; Bruck, green coats faced blue; Murach, green coats faced yellow; Wetterfeld, green coats faced black; the city of Cham had green coats faced white and the 12th Company, raised in the district of Cham, had green coats faced red. Heilmann vol. 2, pp.843–844.

[37] Heilmann, vol. 2, pp.865, 871, 911.

[38] Würdinger, p.55.

[39] Würdinger, vol. 2, pp.839, 914–915; BL Add MSS 39, 288 f.20.

Whilst some regiments do appear to have tried to keep the same colour coats throughout their existence, others probably used whatever colour cloth they could find. In 1621 the colonel's company of Colonel Haimhausen's Regiment is believed to have had blue coats, whereas his lieutenant colonel's company had red ones. However, whether this was two different issues of clothing with one colour replacing the other, or each company having its own coat colour, is not known.[40]

In 1621 Colonel Schmidt's Regiment of Foot, which also served in Tilly's army, was issued with silver grey coats with red facings and grey breeches, along with shirts, stockings, and shoes; on 17 July 1621 Colonel Adam von Herbersdorf's Regiment was supplied with 202 blue coats faced white.[41]

In 1628 the clothiers appear to have supplied red, black and grey loden cloth to the Bavarian commissariat, and when the Swedish Army occupied Munich in 1632 it found between 8,000 and 10,000 sets of soldiers' clothes under the floor of the arsenal, which according to *Theatrum Europaeum*, were "newly made soldiers' coats of yellow, blue, and green colour which were distributed to some regiments under the Swedish Army". Which regiments these coats had been originally intended for is not recorded, nor how they were distributed in the Swedish Army, but they may have gone to re-clothe the regiments of their respective colour, for example the Yellow Regiment etc.[42]

In 1646 113 men from the regiments of colonels Goltz, Fugger, Kolb, Marimont and others received 61 coats, 89 pairs of breeches, 55 shirts, 81 pairs of stockings, 64 pairs of shoes. In addition 55 men of Colonel Fritsch's Regiment 11 received coats, 10 received breeches, 13 received shirts, 15 received stockings and 14 received shoes. Some received a full set of clothes whereas others received a pair of stockings and shoes. These men are known to have been sick or wounded and so issued with new clothes to replace their old ones. Judging from the accounts the breeches appear to have been made from two ells of cloth, and the coats either two, two and three quarters or even three ells of cloth, presumably depending on the size of the soldier. This conforms with an order by Count Matthias Gallas, dated 1645 and preserved in the Army Museum in Vienna, which shows three different sizes, with the coats and breeches being made of five, six or seven ells of grey cloth. Unfortunately, in the case of the Bavarian regiments mentioned the colour of the clothing is not recorded.[43]

Shirts were made of lockram or Osnabruck linen. The Spanish in 1607 received two shirts, "of reasonable fine linen cloth with falling bands and cuffs of Holland, sewed to them edged with bone lace and strings". On the other hand the clothing supplied to the British Army in 1627 by Philip Burlamachi and other armies raised in Germany appear to have allowed only one shirt.[44]

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[40] Karl Freiherr von Reitzenstein, *Der Feldzug des Jahres 1621* (München: F. Straub, 1887), p.147.

[41] Wertheim, vol. 1, pp.112, 394.

[42] Dr Adolf Danner, 'Der Kommierzienrat in Bayern im 17 Jahundert', part 1, Under Maximilian I', in *Oberbayerisches Archiv für Vaterländische Geschichte* (München: 1910), p.277; Bellander, p.590; Monro, part II, p.125; Johan Philip Abelin, *Theatrum Europaeum* (Frankfurt, 1643), vol. 2, p.645; Franz Khevenhueller, *Annales Ferdinandi* (Leipzig, 1722), vol. 12, p.142.

[43] Bavarian Main Archives, Kurbayern Ausseres MS 2883.

A soldier was meant to receive a new set of clothes each year, usually before the onset of winter. Warrants for shoes and stockings are the most common since they wore out more quickly that the other items of clothing. In February 1626 Wallenstein wrote to his administrator, Gerhard von Taxis, asking him to:

> Also have 10,000 pairs of shoes made for the infantry so that later I can divide them out among the regiments. Have them made in my towns and markets and pay a fair price for them in cash. See especially that the shoes are always carefully bound pair by pair, so that one will know which belong together. At the same time have leather prepared for I shall shortly order a further few thousand boots to be made. Have cloth ready also for it may be that clothes will be required.[45]

The city of Cologne supplied colonels Pappenheim and Comargo with 20,000 pairs of shoes and 3,000 boots along with several thousand musketeer bandoliers and pistols. On 1 February 1634 Anton Morel of Lothringen was appointed shoemaker to the Bavarian Army, and in October 1638 4,000 pairs and stockings and shoes were ordered for the Bavarian Army. In 1647 Maximilian ordered 1,327 suits of clothing from Nuremberg. The coats were made of loden, which is a rough cloth, while shirts were made of linen.[46]

The making and issuing of shoes and stockings are the most common warrants since they wore out more quickly than the other items of clothing. In April 1627 Burlamachi was ordered to immediately supply 1,000 pairs of shoes to the soldiers waiting to be embarked for Denmark, and on 27 November 1636 the Landgrave of Hesse Darmstadt purchased 3,000 pairs of shoes and stockings for his army. Maximilian I sent shoes and stockings worth 4,000 fl to his soldiers at Cologne.[47]

On 13 January 1637, when Johan Pluckhandt of Würzburg received an order worth 3,804 fl and 12 batzen, for shoes and stockings for General Johan Goetz, Pluckhandt was required to sort the 1,866 pairs of stockings into four bundles of 300, 380, 100 and 286 pairs respectively, with each bundle being numbered one to four. The 1,701 pairs of shoes were to be in eight bundles of 160, 193, 91, 192, 500, 181, 139, 131 respectively numbered from one to seven and nine. No doubt other items of clothing were similarly bound up in bundles and numbered with each numbered bundle being allocated to a company or regiment.[48] No doubt among the archives in record offices and still with the various families throughout Europe there lie waiting to be found further references to clothing being issued to soldiers.

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[44] TNA, SP 77/8, f.204; Lyle, p.194, Estimate of the charge of clothing the soldiers, 31 March 1627, p.194.

[45] Quoted in Francis Watson, *Wallenstein, Soldier under Saturn* (London: Chatto and Windus, 1938), pp.177–178.

[46] Heilmann, vol. 2, pp.242, 910.

[47] LVR-Archivberatungs und Fortbildungszentrum, Schonst 35 Landgrave Hesse Darmstadt, 27 November 1636, and Schonst 49 Maximilian I, 29 January 1642.

[48] LVR-Archivberatungs und Fortbildungszentrum, Schonst 36, Johan Götz to Johann Pluckhandt of Würzburg.

Since both sides wore the same clothing field signs were worn in battle to distinguish one side from the other. According to John Cruso "Every man must wear a scarf of the prince's colour who he serveth … by which means (besides the ornament) … being subject thereby to be distinguished and upon occasions of battle they shall by that means not to offend each other."[49]

Each nation was identified by the following coloured scarves:

Baden	Yellow red?
Bavaria	White (1620), light blue or blue and white; red from 1635?
Bohemia	Blue (1620), red and white
Brandenburg	Black and white
Brunswick	Yellow and red
Catholic League	Black, white, white golden, red, yellow; red (after 1635)
Denmark	White
Dutch	Orange
England	Dark blue or pink
France	White
Hanseatic States	Black
Hesse	Blue or sky blue
Imperialists	White (1620), then red
Mansfeld (1620–1622)	Red and white, or black and white
Protestant States	Green
Saxony	Red (1620–1624, and after 1635)
	Yellow, yellow and black, or green (other years)
Spain	Pink
Sweden	Green or blue
Weimar	Green, green and yellow; white (French service)
England (1622)	Dark blue

Of course, to confuse the enemy, soldiers are known to have changed their scarves so that they would be taken for the opposite side. Moreover, paintings of officers in these armies show different coloured scarves from what they were meant to be wearing, such as paintings of the Dutch militia showing officers in orange and white scarves and also light blue scarves. In these paintings some men wear scarves over the shoulder, while others wear them worn around the waist. Some even wore their scarves around both.

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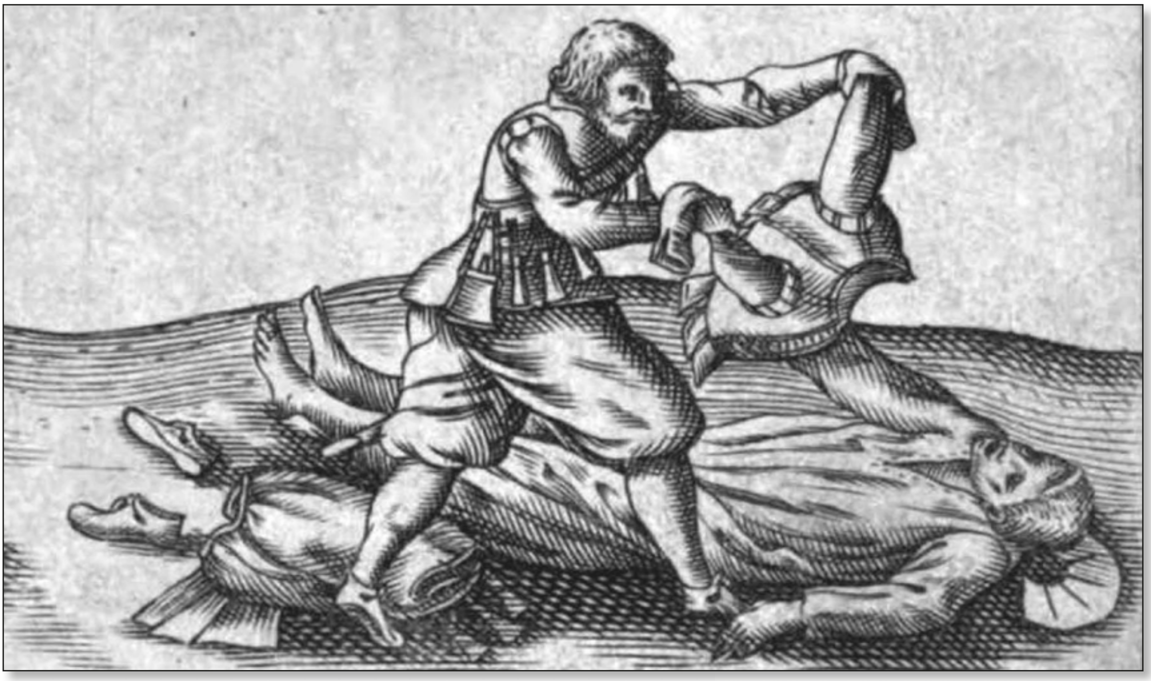
[49] Du Praissac, *The Arte of Warre*, p.17.



Looting on the battlefield. Johann Jacobi von Wallhausen, *Ritterkunst,* 1616. (Michał Paradowski's archive)

Not all soldiers wore a scarf, often they had to make do with a field sign chosen on the day and a field word; for example "Jesus Maria", and a white ribbon tied about the arm was chosen for the storming of Magdeburg in May 1631. At the battle of Wittstock the Swedish used the word "God with us", while the Saxons and Imperialists said "God willing". The Swedes also wore green ribbons about their arms and the Saxons white ribbons, some with a handkerchief upon their hats.

Portraits of the senior officers often depict them in three-quarter armour, but Marshal Grammont saw Tilly at the head of his army "mounted on a small white Croatian pad [horse] in a green satin doublet with slashed sleeves and trousers of the same stuff, a little cocked hat with a red ostrich plume in it … a belt round his waist of two inches breath, to which hung his fighting sword with a single pistol only in one of his holsters."[50] Officers appear to have had to supply their own clothing, and there are newssheets criticising German officers wearing the "foppish" French style of dress with laced collars and cuffs on their shirts and feathers in their hats, with the boots turned down, which was seen as positively un-German. Other newspapers criticised gentlemen who served as volunteers within the ranks for wearing elaborate styles of clothing other than their regimental clothing.

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[50] Quoted in Walter Harte, *The History of the Life of Gustavus Adolphus* (London: G. Hawkins, 1759), vol.1, p.lvi.

6

Arming the Soldiers

As well as an army of tailors who clothed the soldiers, there was also an army of people who made weapons and armour. Among the arms manufacturing towns were Essen, Nuremberg, Liège and Suhl, which were willing to supply weapons to both sides. Artillery could be bought from Nuremberg, Frankfurt, Augsburg, Strasburg and Ulm. Essen's gun foundries dated back to the fifteenth century, while Nuremberg, being situated near the Elbe and Rhine, could easily transport its arms throughout Europe, including to Denmark, Sweden and Russia. As well as the armourer's mark, the city's examiners would stamp the city's coat of arms on the weapons and armour as proof of their quality.[1]

Liège would become one of the greatest firearms-producing towns in Europe, its trade dating back to the sixteenth century. Since it was situated in northern Europe it usually supplied arms to the Dutch and French armies, but in 1621 the merchants received 50,000 florins to arm Count Ernest von Mansfeld's and the Duke of Brunswick's armies, both of which were fighting for the Protestant cause.[2] Meanwhile the arms industry in Suhl dated back to 1535, and specialised in good-quality weapons for common soldiers. Its muskets were stamped with the gunsmith's mark and "SVL" to identify them as coming from Suhl. Between 1619 and 1632 the city supplied at least 61,000 muskets at a cost of two to three Reichthalers per musket; among the many orders placed during the war was one in 1619 to equip 1,000 musketeers for the government of Bamberg, for 3 fl each, as follows:[3]

Musket	2 fl 1 Batzen
Powder flask	5
Bandoliers	5
Musket rest	6
A bullet mould	6
Cleaning equipment and worm	4

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[1] Peter Krenn and Walter J. Karcheski, *Imperial Austria, treasurers of Art, Arms and Armour from the State of Styria* (Australia: Art Exhibitions Australia Ltd, 1998), p.43; Monro, part II, p.212.

[2] Jaroslav Lugs, *Firearms Past and Present: a complete review of firearm systems and their histories* (London: Greville, 1973), vol.1, pp.450–453.

[3] Heilmann, vol. 2, p.910.

In 1622 just one Suhler gunsmith, Simon Stohr, received an order for 4,000 muskets for the Imperialist Army and Wallenstein placed orders with six other Suhler gunsmiths to equip his army; in 1631 alone, 28,950 muskets were ordered. Unfortunately the archives of the Suhler gun makers have not survived, so the exact number is probably considerably more. Suhler muskets were 140 cm long, the barrels were 102 cm and weighed between 4.5 kg and 4.7 kg, shorter than the muskets being produced by Sweden at this time. Swedish muskets were 156 cm long, with a barrel 115 to 118 cm long. The lightness of these muskets meant that the musketeers were able to discard their musket rests, although the older heavier muskets continued to be used.

Like most towns when it came to business Suhl was neutral, supplying weapons and armour to both Wallenstein and the Protestant general Bernard of Saxe-Weimar. Unfortunately this may have been one of the reasons why Isolani's Croats burned down the town in 1634, thus robbing both causes of a valuable supplier.[4] However, by 1639 the gunsmiths of Suhl were producing arms once more and during the summer of 1639 the Jung family were ordered to deliver 4,000 muskets to Vienna. In 1643 another order was placed, this time for 20,000 muskets, 4,500 pistols, 400 carbines and 1,000 pistol holsters, and in 1645 Nicholas Jung received another order from Vienna for 8,000 muskets, 1,000 carbines and 4,000 pistols. The Jung family were not the only arms manufacturers to receive such orders: Valentine Schneider also received an order in 1639, for 4,000 muskets and 2,000 pistols, so the Suhler gunsmiths had clearly recovered from Isolani's raid.[5]

Meanwhile in Hamburg the English government placed an order with Albert Balzer Bearne and Leonard Mercellus on 16 April 1639 to supply 3,000 muskets, 700 cuirassier arms, 700 pairs of holsters and 1,500 sets of pikemen's armour, all "according to the patterns already delivered", which were to be supplied in just eight to 10 days. This contract was one of several placed in April 1639. Probably like shipments from other cities these muskets etc., would be packed in cases, while the accoutrements, such as the bandoliers, spanners and flints would be packed in "dry fats" which were numbered, so that they could be easily distributed to a regiment. The English government seems to have been lucky and the arms were delivered on time, but such was the demand for firearms that orders outstripped production, so there was sometimes a long delay in completing orders.[6]

The largest producer of arms was Nuremberg. In 1625 an order was placed by Hans de Witte for furnishing seven complete regiments of Wallenstein's army, and the order was delivered to Eger five weeks ahead of schedule. Among Nuremberg's merchants was Ulrich Loser, who supplied hundreds of backplates, breastplates, pikes and muskets in 1631, whilst in March 1638 the city supplied 3,000 muskets, 2,000 pairs of pistols and 2,000 pikes to the Imperialist Army. The city also supplied Bavaria with cuirassier armour.[7]

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[4] Anton Ernstberger, *Wallenstein als Volkswirt im Herzogtum Friedland* (Reichenberg i.B.: F. Kraus, 1929), pp.137–140.

[5] H. Ebner, et al., *Festschrift Othmar Pickl zum 60. Geburtstag* (Graz: Leykam Verlag, 1987), p.685.

[6] TNA, SP 81/46 ff.214, 220, 243, Arms from Hamburg, 13, 16 and 28 April 1639.

[7] Ernstberger, *Wallenstein*, pp.137–140.

However, the Dutch arms trade was one of the largest in Europe, if not the largest. Not only did it supply its own armed forces, but in 1621 the merchants in Amsterdam supplied 300 harquebuses, 400 carbines, 1,000 muskets with rests and bandoliers, 1,000 suits of armour, 1,000 pikes, 30 halberds, 16 drums, and 1,000 pounds of lead, match and gunpowder to the Protestant Union. The following year, as well as supplying arms to the Danish and Swedish armies, the Dutch also supplied 3,000 muskets, 3,000 suits of pikemen's armour, 3,000 pikes, 1,000 backplates and breastplates, and 1,000 harquebuses with bandoliers, to Christian of Brunswick's army. In addition they also supplied Christian with 10,000 pounds of gunpowder, 20,000 pounds of match and 10,000 pounds of lead shot.

During the "Danish period" of the war Christian IV purchased 33,000 muskets, 15,000 pikes and 20,000 sets of armour, in addition to 400,000 pounds of gunpowder and 1.7 million pounds of match.[8] As well as these old industrial towns, new centres for manufacturing of arms and armour were established during the war, such as Munich, Graz, Dresden and Vienna, and the bell-founders of Nuremberg and Regensburg converted their foundries to make cannon.

Prices varied: a musket supplied by Nuremberg in 1638 cost 2.5 Reichthalers, whereas one from Cologne or Hamburg cost 2.25 Reichthalers. On 29 July 1634 Cologne supplied the following arms to the Bavarian Army:

1,000 cuirasses @ 8 Reichthalers
2,000 other armour @ 3.5 Reichthalers
1,000 pistols @ 7.5 Reichthalers
3,000 carbines @ 3.5 Reichthalers
2,000 Muskets @ 2.25 Reichthalers
1,500 long and 500 short pikes @ 0.5 Reichthalers

For a total of 33,500 Reichthalers.[9]

When Louis de Geer was equipping the Swedish army during the war he purchased arms not only from the German arms manufacturers at Liège, Cologne, Namur, Aachen, Solingen and Suhl, but also from Holland, before he set up his own factories in Sweden.[10] Unfortunately, receiving arms from different cities and even armourers had its drawbacks, in that the calibres for the various firearms differed, with musket calibres ranging from 17.5–19.7 mm, or in the case for those in Holland, 21.6 mm, and in England from 19.0–22.6 mm. The calibres for pistols also varied from 10.0–14.9 mm. This made it difficult to supply appropriate musket shot, with the number of

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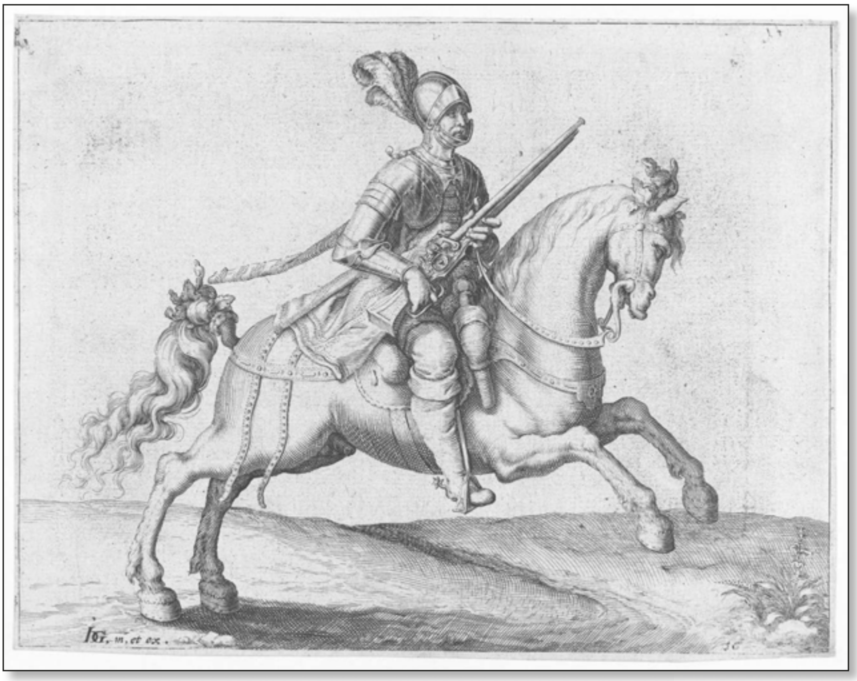
[8] Hans Vogel, 'Arms Production and exports in the Dutch Republic, 1600–1650', in Marco Van Der Hoeven, *Exercise of Arms: Warfare in the Netherlands*, 1568–1648 (Leiden: Brill, 1997), pp.201, 207.

[9] Christian Bartz, *Köln im Dreissigjährigen Krieg: die Politik des Rates der Stadt (1618–1635); vorwiegend anhand der im Historischen Archiv der Stadt Köln* (Frankfurt am Main: P. Lang, 2005).

[10] Erik W. Dahlgren, *Louis de Geer: 1587–1652: hans lif och verk* (Uppsala: Almquist och Wiksell, 1923) vol. 1, p.106.



Heavily armoured cavalryman, armed with harquebus, based on Jacob de Gheyn II's drawings from 1599. (Rijksmuseum)

musket balls varying from eight to 15 balls to the pound. There are accounts of the shot having to be melted down and recast or the musketeers even having to gnaw down the musket balls to make them fit in the barrel. Calibres also changed during the war. Nuremberg supplied muskets with 18.3 mm calibre or 14 balls to the pound in 1631, but in 1634 the city was supplying muskets with a 17.5 mm calibre or 16 balls to the pound. Even when the same gunsmith was supplying muskets or pistols they could vary in weight due to the design of the stock.[11]

Harquebusiers wore buff coats which could be sleeveless, or have cloth or leather sleeves. An account dated October 1632 records that hides from two elks were bought to make Gustavus Adolphus' buff coat, while another buff coat weighed about 3.35 kg, although it was embroidered. Troopers' buff coats varied in weight: the 33 belonging to the Littlecote Collection, which are now stored at the Royal Armouries at Leeds in England, vary from 1.9–3.1 kg. They are made of four pieces of leather for the body panels and four panels for the sleeves stitched together with linen thread. The sleeves are lined with linen, while the main body of the coat is lined with coarse canvas. The Littlecote buff coats are bright yellow, but underneath the linings they are natural leather, suggesting they were stained after they were made, possibly before they were displayed at Littlecote House in Wiltshire. These coats were fastened by either a cord or a leather thong down the front, although several buff coats preserved at the Army Museum in Paris are fastened by hooks and eyes down the left side.[12]

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[11] Peter Engerisser, 'Matchlock Musket, Suhl approx, 1630', <http://www.engerisser.de/Bewaffnung/weapons/Matchlockmusket.html> (accessed 8 May 2015).

Since all the armour was handmade there was also a variance in weight; the collection of harquebusier armour preserved in the Royal Armouries in Leeds, made between 1625 and 1630, weighs 6,245 g for a breastplate and 4,905 g for a backplate. However by 1651 the weight had been reduced to 2,865–4,600 g for a breastplate and 1,190–1,530 g for a backplate. Straps were attached to the shoulders of the backplate which were attached to the breastplate with two small pommels on the chest, and sometimes locked into place by a catch. Two small belts were also attached to the waist to fasten it at the front by a buckle. These plates could either be lined with leather, which made it more expensive, or left without any lining. In addition a harquebusier might also have a helmet and those could weigh from 1.4–1.8 kg. True, this relates to English harquebusier armour, but there is no reason to suggest that armour produced on the Continent varied greatly in weight.[13] The European cuirassier armour preserved in the Wallace Collection in London weighs as follows:[14]

Armour Piece	Savoy, *c.*1620–1635	Augsburg, *c.*1620	French, *c.*1640
Helmet	2.11 lb	2.11 lb	5.7 lb
Gorget	0.652 lb	0.974 lb	1.45 lb
Breastplate	3.51 lb	5.2 lb	3.85 lb
Backplate	4.05 lb	2.488 lb	3.115 lb
Tassets			
Left	1.88 lb	3.135 lb	Not mentioned
Right	1.585 lb	1.74 lb	Not mentioned
Garde rein	1.92 lb	0.510 lb	Not mentioned
Pauldrons & Arms			
Left	2.54 lb	5.975 lb	8.0 lb
Right	2.46 lb	4.105 lb	8.45 lb
Gauntlets (pair)	6.12 lb	2.15 lb	2.55 lb

Pikemen wore a backplate, breastplate and tassets to protect the thighs, although during the late 1620s tassets seem to have gone out of fashion, as there are examples of armour having a metal "skirt" at the front. However, by the early 1630s tassets were back in fashion. As with the cavalry armour they could be lined with leather for comfort. In 1622 Francis Markham recommended that pikemen should wear "Spanish morions well lined within which a quilted cap of strong housewives linen; for Buckram which is the usual lining is too coarse and galleth the soldier's head, as also is too stiff and unplyable by which means it will not guilt like the other. The ear plates shall be lined also."

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[12] Seventeenth-century war weaponry and politics 10th Swedish conference, p.191; Thom Richardson and Graeme Rimer, *Littlecote: the English Civil War Armoury* (Leeds: Royal Armouries, 2012), pp.132–161.

[13] Richardson and Rimer, pp.2–69.

[14] Sir James Mann, *Wallace Collection Catalogue, European Arms and Armour* (London: William Clowes and Son Ltd, 1962) vol. 1.

There are several surviving examples of helmets having cotton lining, including two at the Wallace Collection in London. One is a red woollen and linen cap filled with raw cotton wadding, although this was designed for a burgonet helmet. The other is made of canvas and linen padded with bast.[15]

However, armourers were not always honest about their orders, sometimes sending obsolete armour, which was found to be unserviceable. Also, the sign of a good breastplate, whether for a trooper or a pikeman, was a small dent, which was a proof mark that showed it had been tested by firing a pistol bullet at close range, meaning it was "pistol proof", but unscrupulous armourers would often make the dent with a hammer instead.

Gunpowder was essential in battle for the musketeers and troopers to shoot their firearms, and the gunners needed large quantities to fire their artillery pieces. Nuremberg, along with Cologne, Salzburg, Ulm, Hamburg, Aachen and southern German states including Bavaria itself also supplied gunpowder. Gunpowder was also imported from Italy and Poland. However, in 1634 at least one manufacturer of gunpowder in the Lower Saxony circle, John Kip, was guilty of mixing his gunpowder with large quantities of salt rather than saltpetre, making the powder useless. This deceit was only discovered when the barrels it was stored in were opened.[16]

When the gunpowder was issued to the musketeers they carried it in bandoliers, which according to Francis Markham were:

> About their bodies baldrickwise from the left shoulder under the right arm, he shall carry bandoliers of broad leather … and to this bandolier shall be fastened by long double stings (at least a quarter of a yard in length a piece, that they may with more ease be brought to the mouth of the musket) one large priming charge … and at least twelve other charges of wood, all made of some tough light wood or else of horn, and covered with leather.[17]

Gervase Markham suggested 12 or 13 charges which "must contain powder according to the bore and bigness of the piece by due measure". This powder was poured down the musket barrel, and "a charge greater than the rest … for pan powder." Sometimes a musketeer would be equipped with a separate triangular-shaped flask.[18]

An order for bandoliers to be used by the New Model Army stated that they were to be, "of wood with whole bottoms, to be turned within and not bored, the heads to be of wood, and to be laid in oil (viz), three times over, and to be coloured blue with blue and white strings with thread twist and with good belts".[19]

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[15] Francis Markham, *Five Decades of Epistles of Warre* (London, 1622), p.39; A.V.B. Norman Wallace, *Wallace Collection Catalogues. European Arms and Armour: Supplement* (London: Trustees of the Wallace Collection, 1986)

[16] Ernstberger, *Wallenstein*, pp.141–145; TNA, SP 81/42 f.83.

[17] Francis Markham, *Five Decades of Epistles of War*, p.34.

[18] Gervase Markham *The Souldiers Accidence* (London: John Bellamie, 1625), p.3.

However, the badge of the soldier was the sword, and Solingen was famous for its sword makers inasmuch they were greatly sought after to set up sword factories in other towns and countries. Most illustrations of soldiers, whether in a print from a manual on tactics or in paintings by such artists as Peter Snayers or Philips Wouwerman, show soldiers wearing rapiers which had long blades. However, there are many surviving swords of this period with short blades, either curved or straight, which must have been more practical during a melee and must have been produced in the tens of thousands. In April 1627, of the 3,000 recruits who were to be sent to the King of Denmark's army with Sir John Burlacy 2,200 were issued with swords, 300 with rapiers and 500 with "Turkey swords", which presumably had a curved blade. These usually had a simple hilt with a bar to protect the soldier's hand.

When the armour and so on had been delivered it would be stored in a magazine or "Zeughaus" until it could be distributed to the regiments. In 1627 an inventory of the Munich armoury included:[20]

1,383 Suhler muskets large bore
441 Suhler muskets small bore
90 firelock muskets
51 muskets engraved with the Bavarian arms for the Life Guard of Foot
628 half musket barrels (17 with match and firelocks)
745 harquebuses with large bore
949 harquebuses with small bore
40 carbines barrels
628 pistols and holsters

Unfortunately for Maximilian, in April 1632 when Augsburg fell to the Swedish the city's magazine was said to have been "so well furnished" with arms that Gustavus was able to arm 30,000 men "all after the newest fashion".[21]

Gustavus probably needed these arms because no matter how well, or badly, the arms and armour were made they would quickly be broken, whether during battle or just through wear and tear. Swords might be broken due to soldiers cutting firewood and the mechanisms in firearms would seize up, particularly those of wheel lock pistols if they were "spanned" (wound up) too long so that the spring would no longer drive the wheel against the flint to spark off the gunpowder.

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[19] Gerald Mungeam, 'Contracts for the Supply of equipment to the New Model Army', *The Journal of the Arms and Armour Society*, 1968, pp.88, 90.

[20] Swedish Army Staff, *Sveriges Krieg*, vol. 2, p.141.

[21] TNA, SP 101/42 f.36 *News from Vienna*, 18 May 1624; SP 101/30 f.196.

7

Regimental Colours

Each troop of horse was issued with its own cornet or standard, and a company of foot an ensign. Dragoons, on the other hand, were issued with small guidons which usually had a swallow tail, which sometimes also had a fringe. There does not appear to have been a standard size for these regimental colours, but the ensigns at least were certainly smaller than the huge standards carried during the sixteenth century. Cornets were much smaller than the ensigns and had fringe in one or more colours around three sides of the colour.

The trumpets carried by each troop also had a banner either bearing the captain's coat of arms in the centre, with a similar field of the troop's cornet or similar to the troop's cornet; the drums of a company appear to have borne the same system. If a troop or company or even a regiment dishonoured itself by breaking its oath of allegiance, not only would the soldiers be punished but the head of state's monogram would be removed from the colours and then they would be ripped from the staff and publicly burned by the public executioner, as happened to the Imperialist regiments of colonels Sparr and Niklas von Hagen for their poor conduct at the battle of Lützen in 1632.

During the eighteenth century Walter Harte boasted that he had seen an illuminated manuscript showing all different types of colours, "what surprised me was, that those belonging to the Croatians were the best imagined of any".[1] Unfortunately he did not have a pen to take any notes, nor did he say where he had seen the manuscript, although since he was researching Gustavus Adolphus it could have been the one now held in the Army Museum in Stockholm which was compiled by Olaf Hoffman at the end of the seventeenth century.

In 1685 a survey was taken of all the colours captured by Sweden, and it found that there were 1,821, of which 261 were standards, 48 were dragoon guidons and 621 were ensigns that had been captured during the Thirty Years' War. Originally little care was taken of these trophies: during the eighteenth and nineteenth centuries the colours were held in various places, including Ridderholmen Church, where on 28 July 1835 they were nearly destroyed when lightening struck the building and set it on fire. During the 1840s some of the staves which the colours were attached to were shortened to give them a more uniform appearance while on display, and some of the cannons which had been captured were melted down or sold to generate income. Tourists were able to take clippings as souvenirs, including a fragment of a green cornet which is now in the Shakespeare Birthplace Trust Library.[2]

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[1] Harte, vol. I, p.28.

In 1907 another survey was held of all the colours, which by now had been supplemented by colours captured during other wars, and it was found that the collection consisted of 1,291 infantry colours, 385 staves with fragments of infantry colours, 382 cavalry and dragoon standards, 202 staves with remnants of cavalry and dragoon standards, and 280 staves without any colours at all. Fortunately, since Hoffman was able to draw these colours in the seventeenth century many of his illustrations include details that have been lost over the centuries where the original colour has deteriorated or no longer exists.[3]

Those colours captured by the French forces and Bernard of Saxe-Weimar's army were sent to Paris and displayed in Notre Dame Cathedral, from where, in 1793, they were transferred to Les Invalides. Unfortunately, in March 1814 with the allies at the gates of Paris, the city's governor ordered them burned in the courtyard so that they would not fall into enemy hands. These included the following colours captured at the battle of Wittenweier in 1638:

> The cornet of the Guard company of Goetz, made of blue damask with a cross of Burgundy, silver embroidery with this symbol. "Pro Imperatore et Fide".
>
> A red standard of the Goetz's Guard regiment with a cross of Burgundy with this symbol. "Pro Imperatore et Fide".
>
> A white standard with the Jesuits' mark and embroidered in gold on one side and on the other these letters "MR".[4]

Another source describes a cornet of General Goetz's Regiment of Cuirassiers, captured at Wittenweier, as being "very fair and embroidered with silver and gold". In 1633 Colonel Peter Goetz raised a regiment with red colours and a Colonel John Gotz's regiment of horse had white colours.[5]

Despite various enquiries to the military archives and libraries in France the present author has been unable to trace any descriptions of these colours for the Thirty Years' War period, although there is a colour at the Chateau of Chantilly in France that was captured at the battle of Rocroi in May 1643. This colour is white bordered by blue 'flames' and has the Imperial eagle in the centre.

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[2] T.J. Petrelli and E.S. Liljedahl, "Standar och dragonfanor" in *Antiqvarisk Tidskrift for Sverige* Vol. 14, no.3 (1895), p.4; Fred Sandstedt and Lena Sandstedt, 'Proud Symbols of Victory and mute witnesses of bygone Glories', in Fred Sandstedt, *In Hoc Signo Vinces: A Presentation of the Swedish State Trophy Collection* (Stockholm: National Swedish Museums, 2006) pp.78–87; Shakespeare Birthplace Trust Library Reference no. DR762/332.

[3] Sandstedt and Sandstedt, p.88.

[4] TNA, SP 81/45 f.125–126, see Appendix II for further descriptions.

[5] *A supplement to the 6th part of the German History containing (not only) what hath passed in Germany, but also in divers parts of Christendom* (London: Nathaniel Butler and Nicholas Bourne, 1634), pp.51–52.

As to manuscripts of regimental colours of the Thirty Years' War period, there are two volumes in the Saxon State Archives in Dresden which were compiled by Balthasar Böhme between 1632 and 1633. The first volume has 92 illustrations and the second 160 illustrations, and show the colours carried by the Army of Saxony. Then there is Reginbaldus Möhner's manuscript, which mainly depicts Swedish colours which he saw in Augsburg between 1632 and 1635 and is now preserved in the Augsburg Cathedral Library. There is also a manuscript of several colours belonging to Mansfeld's Army in 1620, which is held at the Museum of the Thirty Years' War at Wittstock.[6]

Another manuscript of late sixteenth- and early seventeenth-century colours is reportedly held by the Royal Library in Copenhagen, but enquiries to the library have not been successful in tracing it so its contents are unknown. There are several manuscripts of colours at the National Library in Paris; although these cover the latter part of the reign of King Louis XIV, one does record the number of colours captured by the French Army, beginning with 250 ensigns and cornets captured at the battle of Rocroi on 19 May 1643 and 400 ensigns and cornets captured at the battle of Lens on 20 August 1648. Unfortunately there are no descriptions or illustrations to these colours and the manuscript does not include other Thirty Years' War battles which the French Army is known to have been involved in.[7]

Another source for regimental colours are the various newspapers that were published at the time. However, these often exaggerate the numbers captured, such as the battle of Breitenfeld where sources vary greatly from "66 ensigns and 22 standards" or "70 standards and ensigns" being captured from Tilly's army, while a third source gives 120 cornets and 60 ensigns, plus 25 pieces of ordnance and Tilly's baggage. If these newspapers are to be believed, the number of colours taken at the second battle of Leipzig on 23 October 1642 was a far greater victory for the Swedish Army than the first one, with 120 ensigns and "70 odd" cornets captured.[8] Only rarely are descriptions of the colours given, for example one in an English newspaper concerning the battle of Wiesloch, near Prague, in May 1622:

> Two great standards or banners, one of white damask, wherein were these words "In Domino Sperantes, co non confundantur" The other standard was of red damask, having on the one side a black eagle and on the other side the Arms of Bavaria, with the golden fleece round above it and under it was written "Adiutorium Domini sit inimicis terror."

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[6] Hans-Christian Huf, *Mit Gottes Segen in die Hölle: Der Dreissigjährige Krieg* (List Taschenbuch, nd) pp.239, 383.

[7] Bibliothèque Nationale, *Drapeaux et Etendant pris depuis le commencement du regne de Louis 14 jusqu'en 1688,* FR14166 unnumbered page.

[8] BL Add MSS 39, 288 f.20; TNA, SP 101/30 f.294; BL TT E127/30, *A True and perfect Relation of a Great and Bloudy Battell fought the 23 October [1642]*, p.8.

> In a third great cornet much spoiled there stood fortune, but it was so torn and tattered that the motto could not be read.
>
> There were also six ensigns of footmen found, but so spoiled with rain and mire, that they could not be known.[9]

It was believed that the greater number of colours captured, the greater the victory, therefore the commanders were willing to offer money to soldiers who had captured a colour; after the battle of Nördlingen in 1634 the King of Hungary is said to have offered 80 thalers for every banner or standard captured delivered to him since there were instances of soldiers tearing up the colours and sewing them to their coats as a badge of honour.[10]

Captured colours were sent to a variety of people. According to the *Annales Ferdinandi* 100 cornets and ensigns belonging to the Bohemian Army were captured at the battle of White Mountain on 8 November 1620; these were sent to the Pope and paraded through the streets of Rome before being lodged in the Carmelite church of Santa Maria della Victoria. Unfortunately they are believed to have been destroyed by a fire in 1833.[11] When Count Ernest von Mansfeld lost eight colours on 30 August 1622 these were presented to the Infanta Maria in Brussels, which included an orange colour with three white roses joined together and a second was red with the motto, "Pro Libertate". When the Imperialist Army under Montenegro surrendered to Gabriel Bethlen in December 1623 he sent all the ensigns and artillery to his ally the Marquis of Jagendorf, and in 1626 Maximilian, who was then seriously ill, sent the colours captured at the battle of Lutter to the Pope to help in his recovery.

Unfortunately, whether seen in a manuscript or actually surviving, the provenance of the majority of colours is unknown, and the identities those that have been attributed to a regiment for many years may change due to further research: for example several large white colours in Stockholm were said to have belonged to Wallenstein's Regiment of Foot, but it is now believed that they belonged to Karl von Liechtenstein's Regiment.[12]

Some countries, such as Sweden, Hesse, Denmark and Brunswick also had "coloured regiments", which were known as the Blue, Yellow and Red Regiments, and Mansfeld's Army of 1622 also had a Red and a Blue Regiment.[13] What the difference was between these and other regiments is not known, but Wertheim suggests that it was referring to their coat colours; certainly the Swedish Yellow and Blue "coloured" regiments had the same coloured ensigns and coats, but it is not certain whether the same can be said of the Green and White Regiments. On the other hand the Schlieben and Goldstein regiments of the Army of Saxony are known to have had the same coloured ensigns as their coats, but were not known as a 'coloured' regiment.[14] Moreover, these regiments were always known as the Yellow Regiment etc., no matter how many colonels they had, whereas the other regiments were known by the name of their colonel which could change several times during the unit's history.

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[9] *A True relation of all such battles as have been fought in the Palatinate*…, 24 May 1622.

[10] It is said that the Spanish–Imperialist Army captured 115 ensigns and cornets during the battle. For colours sewn to coats: see for example the battle of Marston Moor 2 July 1644, BL TT E 54/19, *A Full relation of the late Victory obtained … by the forces under the command of General Lesley [sic], the Lord Fairfax and the Earl of Manchester … against his Majesty's forces under the command of Prince Rupert and the Earl of Newcastle … fought on Marston Moor on the second of July 1644* (London: E. Baliklock, 1644).

[11] *Annales Ferdinandi*, vol. 9, p.1104; Guglielmo Matthiae, *Santa Maria Della Vittoria* (Rome: Ats Italia Edirice, 1999), pp.3, 13.

[12] Eva Turek, *Under False Colours: A case of mistaken identity – are the colours those of Wallenstein or Liechtenstein?* (Stockholm: Armémuseum, 1996). pp.1–46.

[13] Sweden and Hesse also had a Green, White and Black Regiment.

Regimental colours varied in design from a simple design to elaborate images. Some were comical, such as that of Colonel Dietrich von Taube's Saxon Regiment of Dragoons which had a wolf dressed in a priest's surplice and hat preaching to some chickens. Another company had a bear trying to get honey out of a beehive. Other devices used were mythological beasts or human figures such as Fortuna, the Greek goddess of fortune, who is depicted as a naked woman waving a veil above her head.

Sometimes colours had borders, which in some cases makes sorting them into regiments easier, albeit the regiment itself remains unknown; while the many Spanish and Imperialist regiments bore the Burgundian cross on their colours. The Virgin Mary was also a popular device for Catholic regiments, while others bore the monogram of their sovereign, for example "M" for Maximilian of Bavaria or "F II" for Emperor Ferdinand II, or that of the Virgin Mary, which varied between "sDMVBs", "MAR" or "MRA", or Mediatrix Reparatrix Auxiliatrix (or Adjutrix), or in the case of "MR", Maria Regina. A head of state's monogram on colours was not just confined to Catholic rulers: King Christian IV of Denmark had "C4" on many Danish colours and King Gustavus Adolphus of Sweden had either "GA" or "GARS", although it was not as common as Count Gualdo Priorato leads us to believe when he writes that at Breitenfeld the Swedish infantry had "72 ensigns of various lovely colours, upon which was set the king's arms and upon that a great crown, the motto was Gustavus Adolphus Rex Fidei Evangelica defensor".[15]

Priorato also describes one wing of Tilly's cavalry during the battle as having "70 Standards of several colours, with several impresses; among the which one was a great Imperial Eagle, which held in her right talon a Pontifical Crown and in her left the Imperial Sceptre; the word was 'Pro Ecclesia, et pro Imperios.'" The vanguard of foot consisted of "48 ensigns of diverse colours and with several inscriptions."[16]

Regiments might also receive new colours when they entered the service of another prince, since it was reported in October 1625 that, "The horse of the Duke of Holstein which were lately dismissed are now again taken in the service of the Emperor and get new colours seeing they rent the others from their lances as soon as they were dismissed."[17]

Many of the colours which are known to have been carried by Bavarian regiments appear to have been light blue and white, such as the garrison of Munich in 1614 which carried light blue and white colours with a variety of

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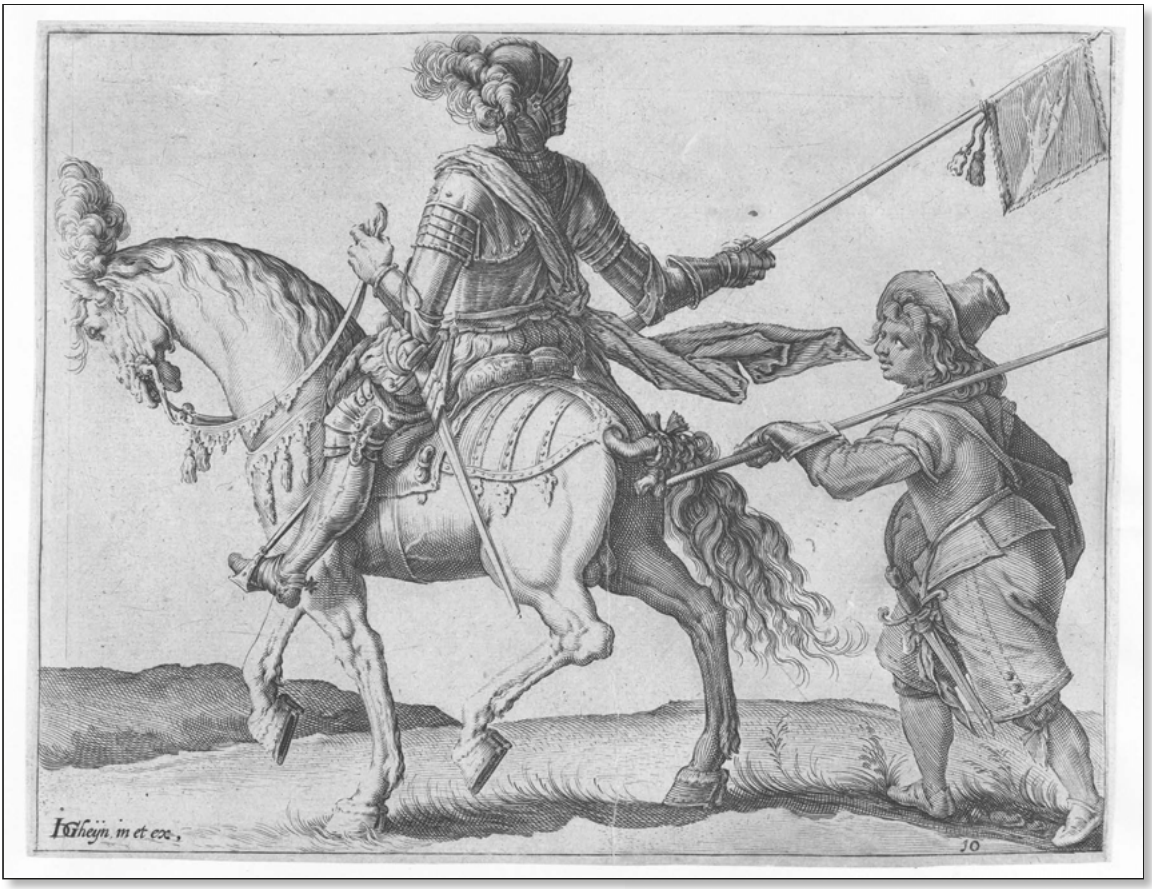
[14] Wertheim, vol. 1, p.425; BL Add MSS 39, 288 f.20.

[15] Priorato, p.42.

[16] Priorato, p.45.

[17] *A continuation of all the principal occurances…*, 1 December 1625.



A cuirassier cornet, based on Jacob de Gheyn II's drawings from 1599. (Rijksmuseum)

designs using wavy horizontal lines; also two white colours, one with a blue St Andrew's cross and the other a blue Burgundian cross. Another company of the garrison carried an ensign with blue and white horizontal bars with a yellow lion, rampart. This horizontal bar design seems to have been popular with the Bavarian Army: one held by the Bavarian Army Museum also has a blue and white diagonal striped border on the top and bottom of the ensign and within a wreath in the centre, the initials "IHS, MRA". This colour measures 219 cm by 238 cm.

According to some secondary sources Philipp Thomas von Pappenheim's Regiment of Foot also had ensigns with horizontal bars as follows:

> Five purple bars and four yellow ones with the Pappenheim coat of arms in the centre.[18]
>
> Two yellow bars with a white one in the centre with a large black Imperial eagle.

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[18] The Pappenheim coat of arms had a black and white field with crossed red swords in the top left and bottom right vair, which is meant to represent squirrels, although it is light blue and white. The bottom of the shield is yellow with two yellow stars within a black box. Philipp Thomas von Pappenheim's case there is an Imperial eagle on the top of the coat of arms.

A light blue bar over white with a red Burgundian cross.

Three white bars divided by two light blue bars, with a red line between the top and lower bars.

A similar design as the colonel's but no Burgundian cross.

A white bar over a light blue bar.

Two white bars with a light blue bar in the centre.

Two light blue and two white bars.[19]

As mentioned in chapter 1, Philipp Thomas von Pappenheim (1569–1633) was only a captain so these could not have belong to him. However, there was a Philip von Pappenheim-Alesheim, (1605–1651) who was a colonel in the Imperialist Army, so these colours may have belonged to his regiment of foot, hence the Imperial eagle. This regiment was known as the Jung Pappenheim Regiment; the Alt Pappenheim Regiment belonged to Philip's cousin, Gottfried von Pappenheim.[20]

These are not the only colours attributed to the Pappenheim family: there are four guidons, one white, another red, blue and black with yellow flames and Fortuna in a yellow wreath with the motto, "Fedelta E Cosa Rara" on one side and the Pappenheim coat of arms on the other with the motto, "Mit Freyden Dran mit Gluck Darvon". Beneath the image of Fortuna is the year 1623. These are believed to have belonged to Gottfried von Pappenheim. However, he served in the Bavarian Army from 1620 until 1624 when he entered Spanish service before joining the Imperial Army, but at no point is he known to have commanded a dragoon regiment.

Diamond-shaped chequer designs were also popular, including that on the colours of Count Adam von Herbersdorf's Regiment of Foot,which also had a dark blue inner border and a red outer one, with a red line running from the canton to the bottom right hand. Another ensign of an unknown regiment depicted a hand holding a sword within a laurel wreath.[21]

In his article *Bayerische Fahnen in Schwedisher Gefangenschaft* (Munich, 1889) concerning the colours preserved at Stockholm, J.M. Forster identified 12 belonging to Bavarian regiments, which includes one ensign with a light blue and white diamond pattern, with orange and light green chevrons around the border measuring 294 cm by 261 cm. In the centre on one side is a white disc with the image of the Virgin Mary surrounded by the inscription "Clypevs Omnibvs in Te Seperantibvs". On the other side is the image of

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[19] Antje & Jurgen Lücht, *Fahnen und Standarten aus der Zeit des Dreissigjährigen Krieges 1618–1648* (5 vols (Borgentreich-Borgholz Buvin-Verlag 2014), vol. 1, *Die Zinnfigur* uniformhelt 21 (nd), p.26.

[20] Biographical entry of Philip von Pappenheim-Alesheim <www.30jaehrigerkreig.de> (accessed March 2021).

[21] Swedish Army Museum accession no. ST 14:13.

St Patrick with the inscription, "1626 St. Patrick Erzbischof". The colour pole for this ensign is 275 cm. It has been suggested that it belonged to a company of Irish soldiers, but this is mere speculation.[22]

Among the Stockholm colours are five ensigns of an unidentified regiment, measuring 290 cm by 260 cm and depicted by Hoffman as follows:

> A dark blue ensign with a white St Andrew's cross and a white M within a white circle.
>
> A blue ensign with a St Andrew's white cross with a red M within a red circle.
>
> A blue ensign with a red St Andrew's cross with a green M within a green circle.
>
> A blue ensign with a red St Andrew's cross with a red M within a red circle
>
> A blue ensign with a white St Andrew's cross with a green M within a green circle.

Other ensigns were more elaborate, like those believed to have belonged to Johann von Tilly's Regiment of Foot, which was also known as Alt Tilly's Regiment. These were 300 cm by 240 cm and had the image of the Virgin Mary above the Altötting church with grass surrounded by a fence and some trees in a row. The ensign itself was divided into four with two white segments and the two yellow.[23] Two other ensigns belonging to the regiment were identical except that they had blue and white and orange and white segments. The Virgin Mary on these ensigns has a red dress with a blue cloak, a blue dress and cloak and a blue dress and red cloak presumably to identify each company. These colours are believed to have been captured at the battle of Breitenfeld in 1631.

The regiment of Werner von Tilly, or Jung Tilly's as he is sometimes known, had a light blue field, with a light blue and white "tooth" shaped outer border and a black and white "toothed" inner border. In the centre is the Madonna and Child with John the Baptist kneeling at their feet with a lamb by his side, and the motto "Ecce Angnvs Dei Qvi Tollis Precata Mvndi, Zabvlo Terribilis Acies Casrorum Protvs et Refvgivm sis Christianorvm" in a wreath. On the reverse is the motto, "Domina Sancta Maria Salvm Fac Imperatorem Nostrvm et Exavdi Nos in Die Qva Invocaverimvs Te". This colour is believed to have belonged to the colonel, because there are three other colours with an identical border, but without a device in the centre. These colours were captured at Rinteln on 12 March 1633.[24]

However, not all Bavarian colours were light blue and white: a Bavarian regiment of foot with 12 companies was seen at Augsburg, and the colonel's ensign was white with a purple and green cross in the form of diamonds, with yellow rays of light emerging from the monogram of "MAR" in the

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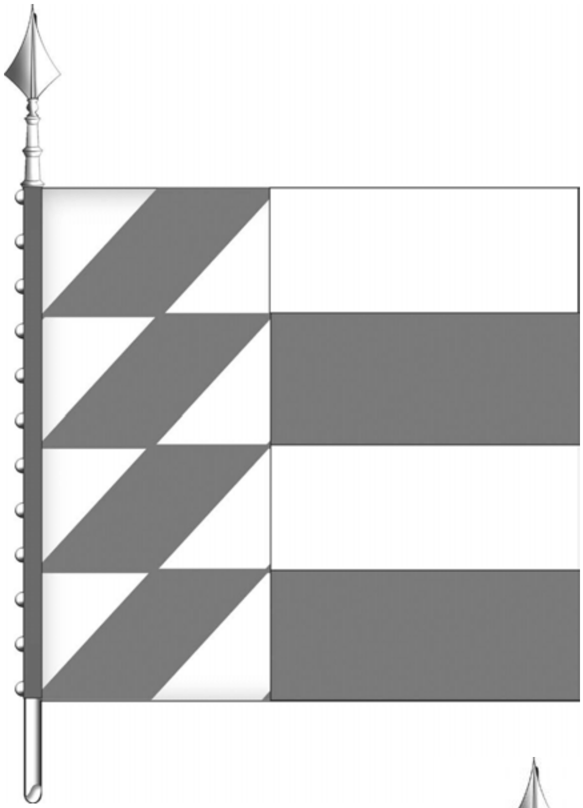
[22] Swedish Army Museum accession no. ST 14:1 in Sandstedt, *In Hoc Signo Vinces*, p.212. At this time the colours of Ireland were green and red, not orange as the authors suggest.

[23] Swedish Army Museum accession no. St 17: 255.

[24] Swedish Army Museum accession no. ST 14:3, ST 14:5, 7 and 8.



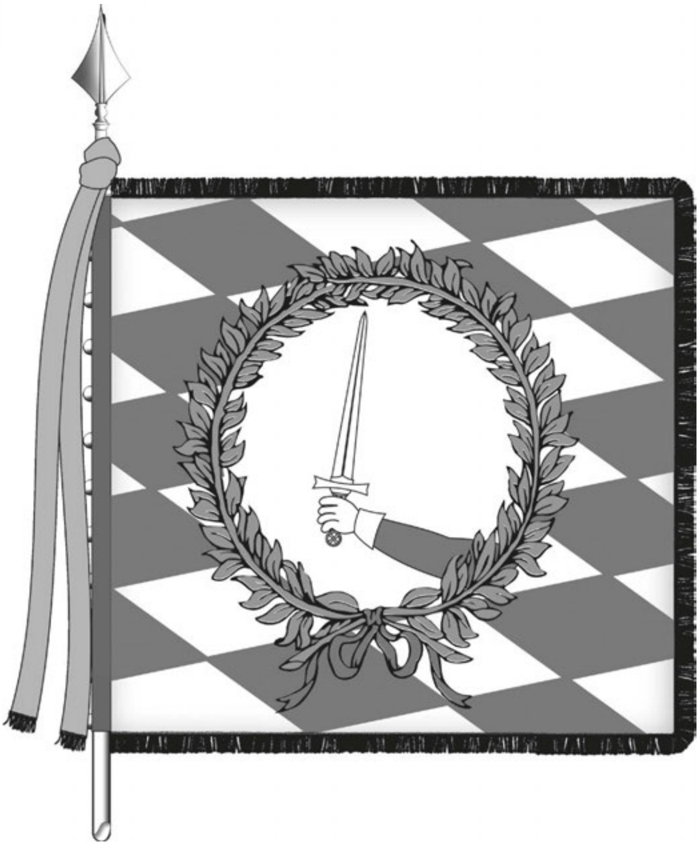
Bavarian Cavalry Cornets by Dr Les Prince

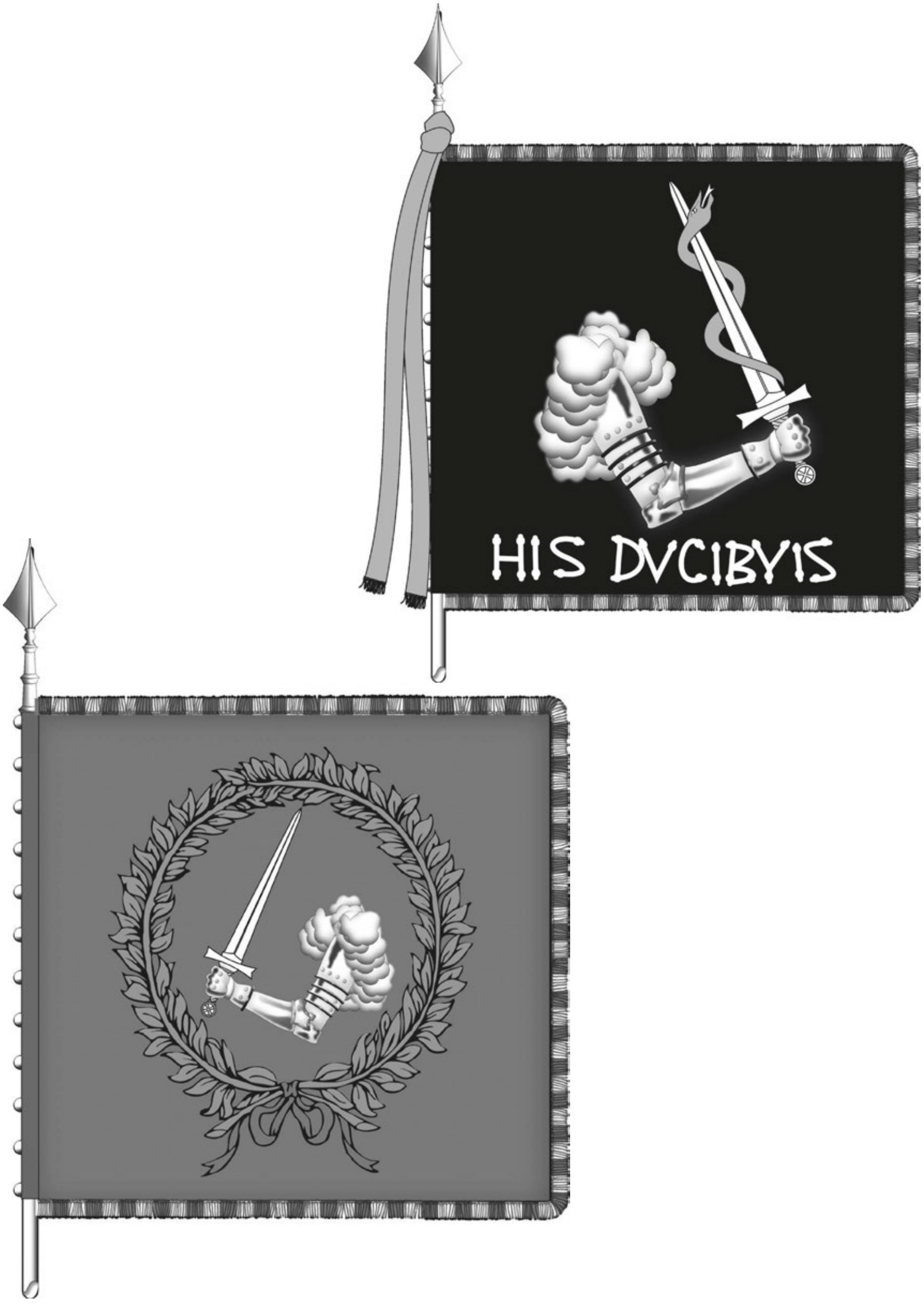
Left: white and light blue

Below: White and light blue lozenges; wreath green; hand proper; sleeve violet with white cuff; fringe light blue; cravat and tassels light blue

Facing page, top: red field; fringe red and gold; arm, snake and script gold; cloud and sword silver

Facing page, bottom: light blue field; fringe light blue and white; arm and sword silver.

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centre of a green circle. The remaining ensigns all had a light blue and white St Andrew's cross, one had a yellow, green, red and white segments, another white, red, white and yellow segments, while another had a green field and another a yellow field. Then there are seven colours with the same cross, and varying patterns of yellow, blue, green, red and white.

Like the infantry, the cavalry also carried cornets with light blue and white diamonds in chequer formation, one of which had a hand holding a sword within a laurel wreath. The fringe was light blue and white. Another cornet was plain blue, measuring 55 cm by 64 cm, and had the letter "M" over the arms of the Wittelsbach family surrounded by a laurel wreath. On the other side is an image of the crucified Christ. This image is also surrounded by a laurel wreath and the cornet has a blue and yellow fringe.[25]

Some cavalry cornets are so elaborately painted that they would not be out of place in an art gallery: for example a blue cavalry cornet measuring 52 cm by 45 cm with a white fringe, with on one side a penitent Mary Magdalene sitting under a tree, and on the other side the Virgin Mary being blessed by an angel. In the four corners are the monogram "sDMVBs".[26]

However, not all Bavarian colours were blue and white; one cornet preserved in Stockholm is red with a yellow fringe. The device on one side is yellow "M" under a crown and on the other side a cross with the date 1621 and two circles with a line through them. At the top of the colour is a partly unreadable motto. In 1619 a troop in the garrison of Nuremberg had a red damask cornet with an armoured arm holding a sword with the inscription, "Pro aris et focis", while another troop in March 1622 had a white damask cornet with the Virgin Mary and an eagle with the inscription, "In Deo et Fortuna". Whereas the garrison of Neuburg had colours of white, blue, red, yellow and black with the inscription, "Iustitia liberabit a morte".[27]

On 26 June 1619 Nuremberg's militia included at least one troop of horse, 150 strong. It is not known whether these troopers were cuirassiers or harquebusiers, but they carried a red standard with an armoured arm holding a sword with the motto "Pro Aris et Focis". The following year a second troop was added bring the strength of the cavalry in the city up to 300 strong commanded by Colonel Johann von Leublfing. On 22 March 1622 a further troop was added under the command of Captain Johann Farbich, whose cornet was white with the Virgin and an eagle with the inscription, "In Deo et Fortuna".[28] By July 1622 the city had three troops and 11 companies and six "citizen" companies.[29]

In 1611 the register for the arsenal of the city of Salzburg records the following descriptions of colours carried by its militia:

> White cornet with the image of the Virgin Mary in the sun, with the inscription, "Sub umbra alarm tuarun".

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[25] Swedish Army Museum accession no. ST 14:11.

[26] Swedish Army Museum accession no. ST G.7.

[27] Heilmann, vol. 2, pp.871, 841.

[28] Heilmann, vol. 2, part 2, p.871.

[29] Heilmann, vol. 2, part 2, p.872.

Blue colour with the arms of Bavaria in the middle.

Green colour with a red cross and a pelican.

Blue colour with a green cross and the monogram of the Duke.

Blue with a yellow lion.

Yellow with a red beam and a white flame.

Red with the country's arms.

Yellow with two red stripes and green flames.

Blue and red with a yellow griffin with golden talons.

White across the corners three yellow and green branches.[30]

The only illustration known to exist of a Bavarian dragoon regiment colour is preserved at Stockholm and is a light blue damask dragoon guidon, 111.5 cm by 227 cm, with a swallow tail and white flames, which is believed to have belonged to a Bavarian regiment. It bears an image of the crucified Christ, with the motto "Jesvs Nasarenvs Rex Ivdeorum", written above the image and below, "titulus triumphalis ab omnibus me defendit malis". On the other side is the image of the Virgin Mary, on the other the inscription, "Maria Mayer Dei Ora pro me". It has a thin blue and white fringe.[31] Hopefully, in time, other Bavarian colours will be identified.

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[30] Würdinger, p.44.

[31] Swedish Army Museum, accession no. ST 14:1.

8

Rations and Pay

Throughout history commanders have known that, to quote Napoleon, "an army marches on its stomach". Therefore it was essential to keep an army well supplied, although this was easier said than done. It was the responsibility of the commissary general of victuals to see that the provisions were distributed to the various regiments within the army. To do this he had to make a list of all bakers, millers and butchers within the army, as well as all ovens and grinding mills to bake the bread. He could also buy provisions from contractors. In 1644 there were two commissary generals within the Bavarian Army, and to help them there were eight war commissaries and under them four provision administrators, eight provision officers and one provision-master baker, one provision leader and one provision henchman.[1]

On 24 January 1634 a typical soldier's ration was described as 907.18 g of bread, 453.59 g of meat and 4.5 litres of beer, or to put it another way a regiment of 1,000 soldiers needed about 907 kg 184.67 g of bread, 453 kg 592 g of meat and 4,500 litres of beer per day, whilst a corporal and a sergeant would receive 907.18 g of meat and bread. On the other hand a corporal of horse and a trooper serving in the Bavarian Army in 1634 could expect 5.625 litres of beer, 1 kg 133.975 g of bread and 680.4 g of meat. Captains were to receive almost 7 kg of bread and about 4.5 kg of meat plus two measures of wine and 15 measures of beer and a colonel 24 measures of beer, 15 measures of wine, 18.16 kg of bread and meat per day.

The meat was probably salted to stop it going bad. During the Napoleonic Wars it was estimated that 900g of salt was enough to preserve 3.6 kg of meat, and so it often had to be soaked in water to make it edible, whereas the officers probably had fresh meat. However, on one occasion Peter Hagendorf was sent out with a foraging party and managed to bring back a whole flock of sheep to the army, which he estimated was 2,000 strong, so they had fresh meat for several days. Hagendorf recalls that he kept two sheep for himself which he slaughtered.[2]

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[1] Friedrich Münich, *Geschichte der Entwickelung der bayerischen Armee seit zwei Jahrhunderten* (München: Lindauersche Buchhandlung, 1864), p.5.

[2] Helfferich, pp.292–293.

The recipe for the bread seems to have been a mixture of rye, oats and flour. The alcohol content of the beer would have been low, and in England it was known as "small beer". The provisions would be weighed on a pair of scales, but no consideration was taken of any bone or fat within the meat, so if a soldier was unlucky then his meat ration for that day would be mostly bone or gristle.

When an army could not rely on the local bakers then brick ovens were built. The historian Géza Perjés estimates that it would take about 500 bricks to build an oven, which was big enough to bake from 599.85–1,125 kg of bread per day. Therefore an army of 10,000 men would need between eight to 15 ovens or 4,000 to 7,500 bricks, which would have to be transported, along with the firewood to heat the ovens, as well as the ingredients to make the bread. Where possible these ovens would continue to bake bread for a number of days while the army was stationary.[3]

However, for many soldiers it was a case of feast or famine. Peter Hagendorf recalled that "on Good Friday we had bread and meat enough, but on Holy Sunday we could not get even a mouthful of bread".[4] Sometimes when the soldiers did get bread it was inedible, as Father Pietro Drexel, who accompanied the Catholic League's army during the 1620 campaign in Bohemia, records in his diary; he bought a loaf of bread from a soldier which was "black and a wet mass", which he could push his finger through like "dough". Of the 70 loaves that were given to Colonel Schmidt's Regiment, 60 were too mouldy to eat.[5]

At the beginning of November 1620 Father Fitzsimon recorded in his diary that:

> At Raconitz we had no bread, and no drink, except the turbid waters of Bohemia. Our food was meat killed on the spot, and spoiled by the smoke of fir trees. Our enemies, to sport with our want, sent us the present of a little bread, and we in turn sent them a sheep, as they were suffering from scarcity of meat. Our soldiers, notwithstanding their privations, were kept in good spirits by the self denial and good humour of their general.[6]

Therefore an army short on rations could still be an effective force if its morale was high, though this cannot be said of Montenegro's Imperialist army when it was defeated in December 1623. It was said that his army had "endured so great a want as they had no bread during the space of three or four weeks and were constrained to eat dead horses and dogs".[7]

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[3] Géza Perjés, 'Army provisioning, logistics and strategy in the Second Half of the 17th Century', *Acta Historica Academiae Scientiarum Hungaricae*, vol. 16 (1970), pp.8–9.

[4] Helfferich, pp.280–281.

[5] Father Drexel's diary, in Sigmund Riezler, *Kriegstagebücher aus dem ligistischen Hauptquartier, 1620* (München: G. Frans'chen, 1908), p.161.

[6] Father Henry Fitzsimon's 'Diary of the Bohemian War of 1620', in *Words of Comfort to persecuted Catholics* (Dublin: Gill & Son, 1881), p.94.

[7] TNA, SP 101/46 State Papers, Foreign Newsletters, f.249, *News from the Hague*, 28 December 1623.

Therefore a commander needed to accumulate large quantities of supplies. In June 1626 Tilly was reported to be gathering all the corn and other provisions he could, and in his camp a dollar could buy an oxen or six sheep. On 17 November 1631 Tilly demanded 100,000 three-pound loaves of bread from Nuremberg to feed his army.[8] Accounts speak of towns being laid waste, but in Ratisbon at the end of December 1633 the price for provisions fell because there was such an abundance of bread, wine, beer and meat. In fact there was so much food that some had to be sent to Nuremberg and other places.[9]

Therefore campaigns were conducted not only for strategic purposes, but also to find fertile land where an army commander could feed his army. The newspaper *More News from the Palatinate*, published on 5 June 1622, records that:

> Count Mansfeld had the advantage of them [Tilly's army] for when the soldiers had eat up their victuals which they brought with them in their knapsacks and drunk out all their water out of their water bottles (those that had it) their wine out of their Borachies there was no stay for them … their hunger which breaks through stone walls and fears no worst enemy then it.[10]

Another newspaper, this time for July 1623, records that in Tilly's army:

> the thirst all this while said to be very sore in his Army; for want of water, was said to be one of the main reasons of his [Tilly's] so sudden retreating; (there being no river near to his former camp, nor other water but such as was brought on horseback in buckets, water-budgets, Borachoes and the like) which made it to be sold extreme[ly] dear.[11]

Nothing had changed by August 1631, when another newspaper reported that Gustavus Adolphus:

> Hath his provisions and victuals coming to him without any let, whereas Tilly hath none but what is brought very far down from Germany to his army, where there is already such a dearth, that a loaf of bread costs a florin of gold … whereby it is thought that Tilly must either go back again or tarrying but a while longer [and] suffer extremely.[12]

Once the army had eaten the provisions of an area the local merchants would increase their prices due the scarcity of the food. On 20 January 1623 Tilly's army was quartered at Hanau, Solms and Isenburg and "everything grows very dear seeing the soldiers have devoured and consumed almost all the provisions hereabouts". A week later it was reported that "they are likely to ruin the Boars [peasants] and other people living in open and unwalled places".[13]

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[8] TNA, SP 81/34 f.71; Heilmann, vol. 2, p.314.

[9] TNA, SP 101/31 State Papers, Foreign Newsletters, f.28.

[10] *More news from the Palatinate*, 5 June 1622 (London: Printed by W. Jones for N. Butter and W. Sheffard).

[11] *The Continuation of our Weekly News*, 29 July 1623 (London: Nicholas Butter and Nicholas Bourne, 1623).

[12] *The Continuation of our Forraine advisor*, 9 August 1631.

However, it was not just Tilly's army that was suffering. In Prague at the beginning of 1623 the Hungarians had invaded Moravia, and the Marquis of Montenegro had to send for reinforcements even though provisions "grow daily all things dearer, the bread is made very small and the beer taxed higher and we are likely to sustain want of flesh and other victuals seeing the soldiers which lie upon the country consume all and stay in conveying of the provisions hitherwards, taking it from the country people upon the highways".[14]

Unfortunately the weather did not help matters for the local population. In the Palatinate in February 1623 there was "such famine that many die for want of victuals and especially in the villages many starve of late when the earth was frozen so that they could not dig roots out of the ground which many feed as if they were hogs".[15]

Of course, in enemy territory the army did not have to worry about paying for its food. On 28 June 1623 Heinrich Rodingus, the rentmaster in Sontra, wrote to the Landgrave of Hesse Kassel:

> The Bavarian cavalry and several servants of the Lieutenant Colonel Herbersdorff forced me with violence and great threats to open the grain supply to them and they took the available wheat, spelt and oats from me to feed the animals, but they did not stop there, but also broke open the lock on the stalls and took away your entire supply of hay and used all the coal.[16]

Rodingus does not mention any other valuables being stolen, so Tilly's army must have just been looking for provisions rather than plunder, but nevertheless this would leave the population short of food, particularly if it was stolen during the middle of winter.[17]

To carry his provisions a soldier would be issued with a knapsack, which was usually a leather bag, although canvas was sometimes used. It was a cylindrical bag fastened at both ends with a cord and a strap enable it to be carried over the shoulder. Unfortunately no examples are known to have survived, but they are depicted in many contemporary illustrations and paintings, which show that they were only large enough to hold about a day or two's rations along with any personal items the soldiers might have.

The soldiers' provisions were usually issued to them daily, probably in the evening after they had set up camp. Each regiment had its own wagons to carry its provisions, ammunition etc., for its soldiers, which was controlled by the regimental wagon master. During the 1622 campaign some of Tilly's regiments of foot had the following wagons:[18]

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[13] *Weekly News*, no. 14, 20 January 1623 (London: Nathanial Butler, Nicholas Bourne and Bartholomew Downes, 1623), p.14; *Weekly News*, 28 January 1623, no. 15 (London), pp.1–2.

[14] *Weekly News*, no. 18, 11 February 1623 (London), p.23.

[15] *Weekly News*, no. 23, 14 March 1623 (London), p.13.

[16] Quoted in J.C. Theibault, *German Villages in Crisis: rural life in Hesse-Kassel and the Thirty Years' War, 1580–1720* (Atlantic Highlands, New Jersey: Humanities Press, 1995), p.142.

[17] Quoted Theibault, p.142.

Regiment	Army Wagons	Horses	Calash	Horses	Sutler Wagons	Horses
Anholt	27	148	8	16	-	-
Herliberg	17	68	17	34	10	40
Schmidt	20	80	9	8	9	32
Mortaigne	20	80	-	-	-	-
Würzburg	24	96	-	-	-	-

Given their popularity it would be highly unlikely that Anholt's, Mortaigne's and Würzburg's Regiments did not have any sutlers attached to them.

The number of wagons in Tilly's army at this time was not unique: in 1622 Duke Ernest of Saxe-Weimar's army of 3,000 foot and 1,000 horse had 500 wagons or a ratio of eight soldiers to one wagon. On the other hand in 1626 Mansfeld had 800 wagons for his 18,000 men and 36 pieces of ordnance, or a ratio of four wagons to nine soldiers. The regimental wagons may have been distinguished by flags identical to those carried by the regiment, but there are no surviving examples or references in archives to confirm this.

In 1625 the Spanish general Ambrogio di Filippo Spinola ordered the Estates of Brabant to supply 500 wagons to carry "provisions of meal and oats" for his army, which was estimated as just 10,000 strong. When the town of Breda fell to the Spanish in 1625 Spinola demanded a further 4,000 wagons to carry away the corn which the Spanish had found in the town. How many wagons he had already is not recorded.[19]

However, it was not just the soldiers and their families who needed feeding: the horses for the cavalry, the baggage train and those owned by the officers also had to eat. It has been estimated that a horse doing a moderate day's work needs about 25,000 calories per day, and so needs to eat about one to three percent of his bodyweight to stay healthy, or 6.8–9 kg per day. Therefore a regiment of horse about 500 strong needs 3,400–4,500 kg of fodder per day. On the other hand a horse employed in heavy work burns 33,000 calories so would need more fodder, plus about 10 gallons of water, so the regiment would also need 5,000 gallons of water per day. Since a horse has a small stomach it needs to be fed several times per day, but unfortunately for the horse a campaign would take a heavy toll on a cavalry regiment.[20] In addition, any cattle for fresh meat would also have to be fed, and it has been estimated that one head of cattle on average consumes about 11 kg of hay per day, plus water.

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[18] Wertheim, vol. 1, p.121.

[19] TNA, SP 77/18 List of Spanish forces in the Netherlands, 1625, ff.12–13, substance of Spinola's letter to the State of Brabant and their answer, 16 June 1625, f.169; TNA, SP 101/28, State Papers, Foreign Newsletters, 1620–1625, f.152; TNA, SP 101/29, State Papers, Foreign Newsletters; BL Harl MS 7364, A book of tactics in Charles I's time.

[20] Robin Higham, 'Some Thoughts on the 30 Years War', in Jan Vilím, *Bellum Tricennale* (Prague: Historical Institute of the Army of Czech Republic, 1997), p.340, and on horse feeding at <http://ecoquine.wordpress.com> (accessed December 2015).

Pay

The soldier's diet was monotonous, but he could buy extra rations from the many sutlers who accompanied the army. Unfortunately for the soldier he was rarely paid on time, with Maximilian, like most heads of state, preferring to spend the money in his war chest on weapons, supplies and raising new levies rather than on the soldiers themselves. Therefore pay soon fell months, if not years, in arrears. It was only when the soldiers were required to take the offensive that Maximilian reluctantly paid part of their arrears.

At least at the beginning of the war a Bavarian soldier was lucky in that he received higher pay than in other armies: 18 fl per month for a cuirassier, 16½ fl for a harquebusier and eight for a pikeman or musketeer, whereas a harquebusier in the Imperial service received 12 fl and a cuirassier 15 fl per month. On the other hand during the early 1620s Tilly was paid 2,000, later 3,000, florins per month, as the lieutenant general of the Catholic League; his subordinate, Lieutenant Field Marshal Anholt, received 1,500 florins per month in 1622 and 3,000 florins in 1628. However, as the war dragged on there appears to have been a decline in the wages of the senior officers, because General of Cavalry Johan de Werth only received 1,200 fl per month in 1636 and General of Artillery Franz Royer was paid 2,000 fl in 1648, plus free lodging. In contrast Wallenstein in 1625 received 6,000 fl per month and the pay of his subordinates was also higher in the Imperial Army than in the League's army. Later in the war there was parity between the two armies.[21]

The terms of pay differed between nations. The Dutch army received three shillings a week, but 12 pence was deducted for the captain to buy the soldier's clothing, which was issued once a year. If the soldier was maimed while in service he would continue to receive pay even after being discharged from active service. A soldier in the Spanish service received the equivalent of 16 shillings a month, although a financial 'month' could be between six and eight weeks long. On the other hand soldiers in the Swedish and the Imperial service received six shillings a week, but "theirs is a hard service to lye out wet and dry" on campaign. The Polish Army also paid its soldiers six shillings a week but cashiered most of its soldiers just before winter.[22]

To help finance the war effort a country or state would impose taxes on the population, especially if they were in hostile territory, but this only worked when the state controlled large areas of land. When it lost control of these territories, as in 1645, the system broke down and Maximilian had to rely on his own finances to keep the army in the field. As early as the beginning of June 1622 it was reported that soldiers were going unpaid, so that "the Bavarian soldiers fall daily to Mansfeld, I have seen it and have heard it of his officers that they go twelve or sixteen in a day out of a company. And two days ago there was money going to pay for four months, but Mansfeld soldiers took it." On 8 March 1623 it was further reported that Tilly could only pay his army four months pay and that it was 16 months in arrears. To save money in June 1623 Maximilian is said to have "paid the army for four months and hath reformed 15 troops of horse, having cashiered the officers".[23]

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[21] Redlich, pp.311–314.

[22] *Diary of Thomas Crosfield*, ed. Frederick Boas (London: Oxford University Press, 1935), p.67.

This was still not enough, and in January 1624 Tilly's army was still 14 to 15 months in arrears and some troops soldiers were deserting to join other armies, including Mansfeld's and the Duke of Brunswick's; even though the former had the reputation of rarely paying his soldiers, he did allow them to plunder civilians instead. In May 1624 it was reported that "a great sum of money hath been sent to Frankfort towards the payment of Tilly's army, but [it is] not sufficient to content them". When the campaign season began the following year, Tilly's troops mutinied and refused to march, and began to "cry out for money".[24]

The situation had not improved by 3 January 1627 when it was reported that:

> Some colonels and captains of Tilly's army are at Vienna for the pay of their troops that are now in Bohemia … The regiments of Tilly's army winter here and there in the circles of Bohemia. The other horse which Tilly sent since began to mutiny in Franconia and would go not further till the arrears of their pay were paid them, which because they would not serve against Bethlen Gábor they pretended to be due up to then for 14 or 15 months. Some companies tore [up] their cornets and seek new masters. Many of them are gone to Mansfeld and Brunswick.[25]

In September 1631 when Tilly invaded Saxony, he wrote that "in all the days of my life, I have never seen an army so suddenly and totally deprived of all that it needs, from the greatest to the smallest requisite … And I am utterly astonished that the poor soldiers remain so long in such necessity." While Colonel Snetter who commanded the Bavarian forces in Ingolstadt begged, "[for] Heavens' sake" for more provisions. When Tilly died early in 1632 he bequeathed 60,000 thalers to his army.[26]

Not getting paid was one thing, but during the early 1620s there was hyperinflation, known as "wipper and kipper", when the value of the currency fell dramatically, and so what little money a soldier did have was practically worthless. Sir Horace Vere probably echoed many commanders when he wrote on 6 May 1622:

> The miserable estate of the soldiers through abuse in the valuation of money growing daily worse and worse, and finding that without reformation in that point

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[23] *Copies of Letters*, 30 May to 11 June 1622; *More Newes from the Palatinate*, 30 May to 10 June 1623.

[24] TNA, SP 101/28, State Papers, Foreign Newsletters, ff.23, 242, 189.

[25] TNA, SP 101/46, State Papers, Foreign Newsletters, *News from the Hague.*

[26] Quoted in Geoffrey Parker, *Europe in Crisis, 1598–1648* (Glasgow: Fontana, 1984), p.223; Redlich, p.508.

> it will be impossible to continue their or raise new troops … and not sufficient for food, I conceive it a thing worthy [of] compassion.[27]

Fortunately by the mid 1620s there was a significant improvement in the inflation rate, with the old debased coinage being recalled and a new currency issued.

But there was another problem with not paying the soldiers: it bred indiscipline, which the officers were reluctant to stop since without money they could not buy food or other essentials and the only way to obtain it was to steal it. True, there were military laws against plundering, rape and murder. On 1 August 1641 a general order issued by the Imperial headquarters, read:

> Swearing will be punished the first time according to the discretion of the authorities; thereafter it is punishable with death. Stealing a cow or a horse secretly or by force will without judgement and investigation and without mercy be punished by hanging. If one is in possession of a stolen horse and cannot show from whom it was purchased, he will be punished as if he were their thief. Whoever mistreats or tortures a civilian or attacks anyone on the highway will pay with his life.[28]

How effectively this edict, and others, were imposed is not known, but this did not mean that the officers always turned a blind eye to crimes committed by their men, particularly when it came to discipline within the regiment, such as hitting an officer, informing the enemy of a password or falling asleep on guard duty. A soldier could expect death by hanging; if more than one man was found guilty then they might cast lots, which could either be in the form of throwing dice, the man with the lowest score being executed, or draw tickets from a hat and the soldier drawing the piece of paper with a gallows on it being hanged. If an officer was found guilty they might be shot or beheaded, which marked their noble status.

For other crimes a soldier might be made to “ride the wooden horse”, whereby the soldier had his hands tied behind his back and sat on the edge of two wooden planks for a given period of time. Weights might also be tied to his feet to make the punishment more severe.

A worst punishment was the strappado. A soldier would have his hands tied behind his back and be hoisted up by the hands or thumbs so he could only stand on tiptoes, or he might even be raised off the ground completely before being dropped at least once, which would often result in his arms being dislocated. It was believed that the very sight of a strappado, “will do good in a wicked mind”. In his 1633 *Les Grandes Misères de la guerre* (Miseries of War) Jacques Callot shows a soldier undergoing this punishment, having been raised high above his comrades. The caption reads, “It is not without cause that great captains have well advisedly invented these punishments for idlers, blasphemers, traitors to duty, quarrellers and liars, whose actions, blinded by vice, make those of others slack and irregular."[29]

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[27] TNA, SP 81/24, Sir Horace Vere, 6 May 1622, ff.144–145.

[28] Robert Ergang, *The Myth of the all-destructive fury of the Thirty Years' War* (Pocono Pines, Pa.: The Craftsmen, 1956), p.19.

Imprisonment was used if a soldier blasphemed for the first time, but it could also be used if a soldier was "seen without his sword" or if he left his garrison or lodging without a pass, struck a fellow soldier or was insolent to an officer, did not keep his weapons clean or even sold or pawned them. For a second offence "blasphemers" and "common swearers" could expect to have their tongue bored with a red hot iron. How often this was carried out is not known.

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[29] Daniel, Howard (ed.), *Callot's Etchings: 338 Prints* (New York: Dover Publications, 1974), sketch no. 274.

9

Billeting the Soldiers

A critical part of the soldiers' welfare needs was shelter, particularly during inclement weather. There were two types of quartering, military encampments when an army was quartered in the countryside, or being billeted upon the local population. Both could last from a day or two to several months, or in the case of billeting, even years. Either way it was the responsibility of the quartermaster general of the army and regimental quartermasters, who would ride ahead of the army and allocate an area or town where a regiment was to quarter. Towns or villages were preferred whever possible, but when these were few and far between the quartermasters might decide to establish an encampment in the open fields.[1] In fact the Spanish army preferred to demolish the houses within a settlement since the timber would make more shelters for the soldiers than if they quartered in the houses themselves.

Military Encampments

Among the many military manuals of the day there were diagrams and instructions of how to form these military encampments, with each company or troop being gathered together within the space designated for the regiment. The camp would be set out like a small town with lanes between the rows of soldiers' huts. Henry Hexham recommended that a general should choose the ground where his army is to encamp carefully, so that it is not too near any woods or hills where the enemy might be able to observe the soldiers' movements or launch an attack. He also recommended that a ditch be dug around the camp, four feet deep by three feet broad, to protect it from attack. However, military engineer Samuel Marolois suggested that the ditch be six to eight feet broad and five to six feet deep "and the parapet of the same breadth and height".[2]

Hexham also suggested that if possible the camp should be by a river, not only for defensive purposes, but also that any waste may be thrown into it. If

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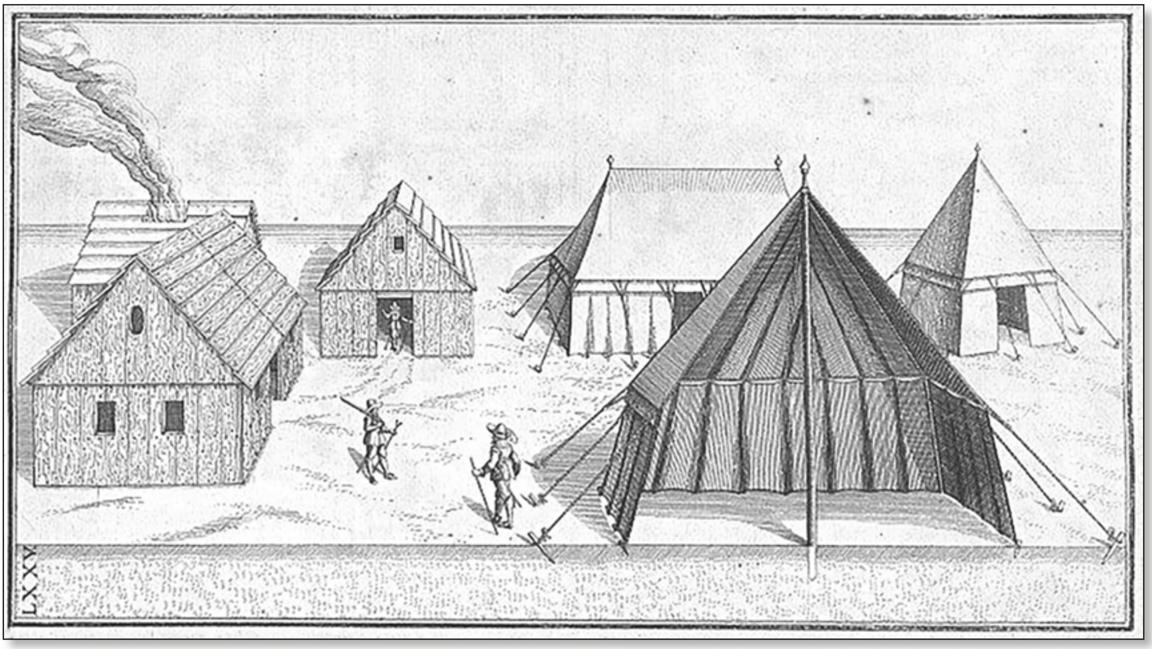
[1] Henry Hexham, *The Principles of the Art Militarie*, part 2 (1642), p.21; Geoffrey Parker, *The Army of Flanders and the Spanish Road* (London: Routledge, 1997), p.166.

[2] Samuel Marolois, *The Art of Fortification*, translated by Henry Hexham (Amsterdam: 1638), p.32.



The ideal military encampment. *Kriegswesen & Belagerung & Zelt & Hutte'* (A view of camp and huts), from Wilhelm Dilich, *Peribologia, seu Muniendorum locorum ratio Wilhelmi Dilichii*, 1641.

there was not a river nearby then the remains of the cattle should be buried outside the camp.

However the single unit in these encampments was the hut or tent where the soldiers would live. Soldiers seem to have preferred huts to tents: the diarist John Evelyn, who served as a soldier in the Low Countries in 1641, recalled that a hut "during the excessive heats was a great convenience … [whereas] the sun piercing the canvas of the tent, it was during the day, insufferable, and at night not seldom infested with mists and fog, which ascended from the river." Marolois also stated that huts were "warmer [at night and] cooler against the sun and more durable".[3]

Unfortunately no instructions survive on how to build one of these huts, but they were made of any materials at hand, so usually wood covered with turf or straw. William Garrard, writing in 1591, records that:

Having marched all day and coming at night to the place where they must camp, one sets out the driest and warmest plot of ground he can get in the quarter, which is appointed to his band for lodging … whilst another makes provisions with one of their boys, in some adjoining village (if time and safety from the enemy doth permit) for long straw both to cover their cabin and make their bed … another with a hatchet … doth cut down forked bows and long poles to frame and rear up their cabin withal and provide timber and fire wood if it be winter or if need requires.[4]

Hexham also records that the soldiers "[made] their huts of forks, lathes withes and straw or if they were staying just one night, sticks and boughs or as such things as they can get". Some illustrations of encampments show these huts made from wooden planks over a frame and open at both ends, while others show a more study construction with walls, doors and even a window. One contemporary source records that:

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[3] John Evelyn, *The Diary of John Evelyn*, ed. William Bray (Frederick Warne & Co, 1818) p.26; Marolois, p.38.

[4] William Garrard, *The Art of Warre. Beeing the onely rare booke of Myllitarie profession* (London, 1591), p13.

> In each hut or cabin you shall lodge two common soldiers and so you shall have 50 huts for each company, divided into ranks, each rank consists of 25, every hut is to be six foot broad and seven foot long, each hut shall be distant one from another rank [by] two feet. The ranks shall be divided by a street or lane of 10 foot broad.[5]

Other sources, including Robert Ward, suggest that the hut should be eight feet by eight feet. Ward also states that the Swedish armies had three men per hut because they drew up six files deep, whereas other armies had two. Whatever the size of the hut and the number of occupants, it was the sergeants' duty to make sure that:

> The soldiers build their huts even and keep exactly the measurements so the streets may be even and that if it be possible that the huts be built all of one height and after one and the same fashion … All the doors of the huts must be open to the lane that is between the ranks of the huts.[6]

Thomas Raymond, who was a "gentleman of the pike" in Colonel Packenham's English Regiment in the Low Counties in 1633, does not describe his accommodation but records that he "only wanted a good bed and sheets", to make himself comfortable. He managed to purchase "an old tent" to make a bed with, which he stuffed with straw and "supported with four crutches two foot from the ground" and managed to sleep "excellently well".[7]

The standing orders for Sir Horace Vere's army, dated about 1614, record that:

> [the] Quartermaster ought to go through every captain's quarters to see if the soldiers have built their cabins high and wide enough and have made their beds above the ground. The captains ought every three weeks to get fresh straw to give their soldiers … and to air their cabins and to keep their quarters swept every day very clean to avoid sickness.[8]

Illustrations of military camps show that the soldiers' weapons were to be left outside the huts.

The soldier and author Francis Markham also states that the corporals should make sure that the men of his squadrons should "live together like

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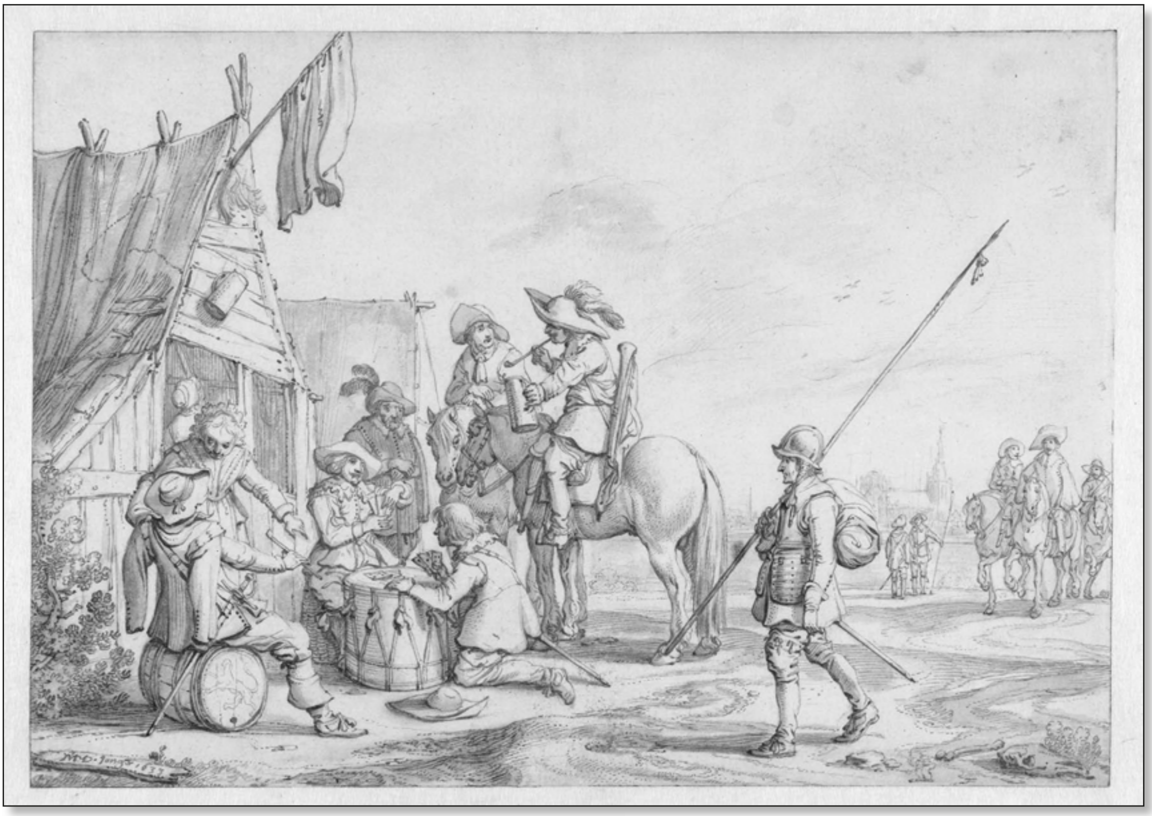
[5] BL Harl 6344, *A Short military treatise concerning all things needful in an army*, ff.160–169.

[6] Ward, Book 2, pp.32, 38.

[7] G. Davis, (ed.) Thomas Raymond, *Autobiography of Thomas Raymond* (London: Royal Historical Society, 1917), p.38.

[8] TNA, SP 9/202/1/18 Compendium of the Discipline of the Art of War under Sir Horace Vere, 1603–1625.



Soldiers’ camp. Jan Martszen de Jonge, 1633. (Rijksmuseum)

lovers and companions”, meaning for example helping each other out, rather than implying any sexual connotation. When a soldier brought his wife or “whore” with him then they would share a hut, along with any children they might have.[9]

All the manuals agree that it was up to the provost and the corporals to make sure that the camp was kept clean, especially when an army quartered in the same place for a long time, for example when besieging a fortress or town.

In front of the company were quartered the captain, ensign, clerk and drummers, whose tents or huts were prescribed to be 20 feet from the soldiers’ accommodation. The lieutenant, sergeants and the surgeons were quartered behind the company, with a 10-foot road separating them from the company. Officers also appear to have preferred huts, but senior officers would have to live in tents which they were expected to purchase themselves. According to Thomas Raymond, “My colonel had a kitchen tent, a servants’ tent, a lodging tent for himself and another, the largest and fairest tent of all, wherein he eat, gave audience to his officers and entertained. Which also was our church having there every Sunday morning a sermon preached by the chaplain to the regiment.”[10]

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[9] Gervase Markham, *Five Decades of Epistles of War*, p.67.

[10] Charles S. Terry, *The Life and Campaigns of Alexander Leslie, First Earl of Leven* (London: Longman, 1899), p.72.

There was also to be a place behind the company, 20 feet wide and 24 feet long, "to wash and dress meat". The regulations stated that a whole company should take up an area 300 feet long by 24 feet wide.[11]

Horses were to be also housed in huts, which were to be:

> Seven foot long and six broad and lodge 25 horses in one rank, behind that you shall leave a void place of 10 foot broad and then lodge 25 horses more in such manner as all the horsetails may be towards that void place and their heads towards their masters' huts. Between which and the horses' heads you shall leave a space of five foot for the horsemen to put their forage and provender.[12]

The cavalrymen were also to make their huts seven feet long and five feet broad and leave two feet between every hut so that for 50 horses and their riders. A road divided these huts into troops. The treatise continues:

> It is to be noted that the horses' dung may be cast upon the place where the wagons stand but no other kind of dung [or] filth because horses dung does not infect the air nor is not unwholesome as other dung and it is the provost marshal's part by means of his sergeants to look unto this and that the quarters be kept clean.[13]

The men and horses of the artillery and wagon train were to be lodged in a similar fashion.

However, when on the march a soldier might not be able to erect a hut, like Thomas Raymond, who "Had nothing to keep me from the cold wet ground but a little bundle of wet dried flax, which by chance I lighted on, and so with my boots full of water and wrapped up in my wet cloak, I lay as round as a hedgehog, and at the peep of day looked like a drowned rat."[14]

Another officer found a small piggery, which he used as a shelter one night, but not before he had eaten the previous occupant.

There were strict rules on how the soldiers and camp followers should conduct themselves in camp. The quartermaster:

> Shall suffer no soldier, his wife or child or any other in their behalf to draw any beer, sell any goods or sutler within the regiment for to this end there are sutlers ordained and allowed and their cabins appointed behind the regiment.
>
> Secondly he shall not permit any places for the dressing of meat or dicing tables or any holes for what purpose so ever to be dug neither before nor behind nor near the quarter being dangerous in the night time both for men and horse to pass such ways, especially upon any occasions of alarm which may breed great inconvenience and disorder, for behind the sutlers cabins there is a firing place appointed to dress their victuals aside from all other passages.

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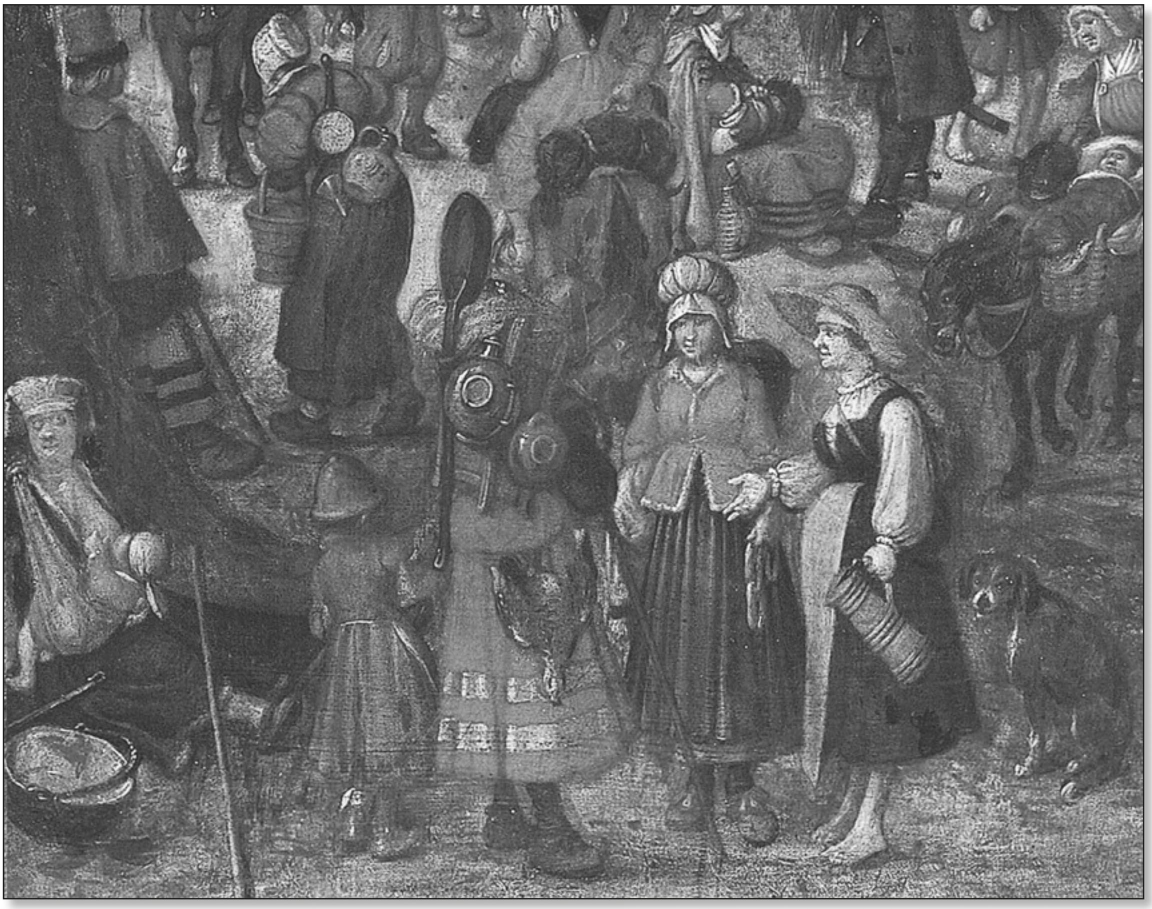
[11] BL Harl 6344, *A Short military treatise*, ff.160–169.

[12] BL Harl 6344, *A Short military treatise*, ff.160–169.

[13] BL Harl 6344, *A Short military treatise*, ff.160–169.

[14] Wilson, *The Thirty Years War: a Sourcebook*, p.163; Raymond, pp.38, 39, 40.



Women following troops during the campaign, by Sebastiaen Vrancx.

Thirdly he shall not suffer any building of cabins, placing of tents or shops, selling of goods upon wagons or cars [carts] or any thing else within the foresaid alarm place or ways before, behind, within or about his regiment but command all such to repair to the market place.

Fourthly considering that butchers are permitted to lodge here in the cabins behind the regiment and that their proceeds much filth and stink from the beasts that are killed causing great sickness and infection, the quartermaster shall cause the [provost] marshal to take care that a pit may be digged at a convenient depth and largeness in the ground behind the quarter which shall be covered with strong spurs and planks laid over in the midst of which planks shall be a door to shut and open of one foot and a half square. These pits shall be made at the charge of the butcher or butchers, that shall quarter with the regiment. If necessary also that every colonel or great officer that keeps a table should have such made near their lodging that a whole quarter might be kept sweet and wholesome as well as their own lodging which otherwise in small time must needs grow very nasty and noisome.[15]

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[15] BL Harl 7364, A book of tactics in Charles I's time.

The sutlers' tents and huts were also organised in a street of two rows of stalls. These streets are often recreated by contemporary artists, such as Palamedes Palamedesz or Philips Wouwerman, who wanted to create a picturesque scene of camp life. These artists usually depict sutlers' stalls with laurel wreaths, a tankard or a flag hanging outside the tent as a symbol that a soldier could buy food and beer there, and probably other things as well.[16]

Billeting Upon the Population

Many of the contemporary military manuals state how a military encampment should be laid out but there is nothing which relates to soldiers being quartered in towns and villages, which was the preferred option for the soldiers, especially during the winter. However, the quartermasters would chalk on the door of a house the name of the regiment or company and the number of men that the property was to accommodate. Where possible a company was quartered together, making training easier and they were to set watches to keep order. Unfortunately the local population had no say in the matter, and with most houses just having a couple of rooms, and probably only one bed, this would bring misery on the householders. True, the occupier of the house would be paid for bed and board, but the cost was nowhere near enough to compensate for the inconvenience of billeting one or more soldiers.

When the Swedish Army occupied Munich in May 1632 one chronicler records:

> All soldiers had soldiers quartered on them according to their wealth and income, and provided them with food with food and drink for up to ten days … where the owners were absent, the soldiers cleaned out the houses, took corn from the bins and sold it.[17]

However, not all buildings were occupied, since Gustavus Adolphus placed a guard on the monasteries and noble houses.

In 1633 Peter Hagendorf records that when Pappenheim's Regiment of Foot was quartered in Ravensburg, he had "good quarters", but the head of the household, Johannes Stobel, a grocer, not only had to billet Hagendorf, but also his family. What Stobel thought of his new tenants' behaviour is not known. Although there must have been soldiers who respected the householders they were quartered with, others did not. In 1633 Augustin Gunter of Colmar in Alsace records:

> I was onerously burdened with the quartering of soldiers … I had to argue with them often because they wanted to have better food that I and my children have

---

[16] Jos. W.L. Hikhuijsen et al., *Beelden van een strijd: oorlog en kunst vóór de Vrede van Munster, 1621–1648* (Zwolle: Waanders, 1998), p.251.

[17] Carl J. Burckhardt, *Richelieu and His Age* (London: George Allen and Unwin Ltd, 1965), vol. 2, p.396.

> … I was tormented by them to the utmost … In the night they took my wares and took wine from the cellar … often I found the tablecloth on the table, the mugs and glasses full of urine, the tablecloth cut with a knife and other housewares defiled and destroyed. Then my two young daughters complained with crying eyes that the way that they were handled by the soldiers, they could not stay in the house.[18]

When Gunter complained to the soldiers' quartermaster, the man was not interested and told him to go away. After contemplating the situation Gunter put this incident down to the punishment of God for his sins rather than the soldiers' ill discipline. God would inflict further punishment on Gunter two years later when more soldiers were billeted on him, whose behaviour was just as bad.[19] Even one soldier could bring disruption to a household. A Hessian soldier known only as Mathes who was quartered on an unnamed family in Westphalia had done "a lot of harm by breaking windows, doors and furniture, even by inflicting serious beatings, but the worst was yet to come", records mayor Christoph Brandis. "Mathes was still lying in the loft, he called down that somebody better bring him a pitcher of milk, or he would tear the whole place apart." The head of the household, known only as "D", sent his 17-year-old daughter to fetch some milk and take it up to him, Mathes not only raped her but also mutilated her and after 14 days she died. On 7 April 1636 her father complained to the soldier's captain, who said he could do nothing since his daughter was already dead and so let Mathes go unpunished.[20] The inhabitants of a town they could only hope that the soldiers would move on quickly.

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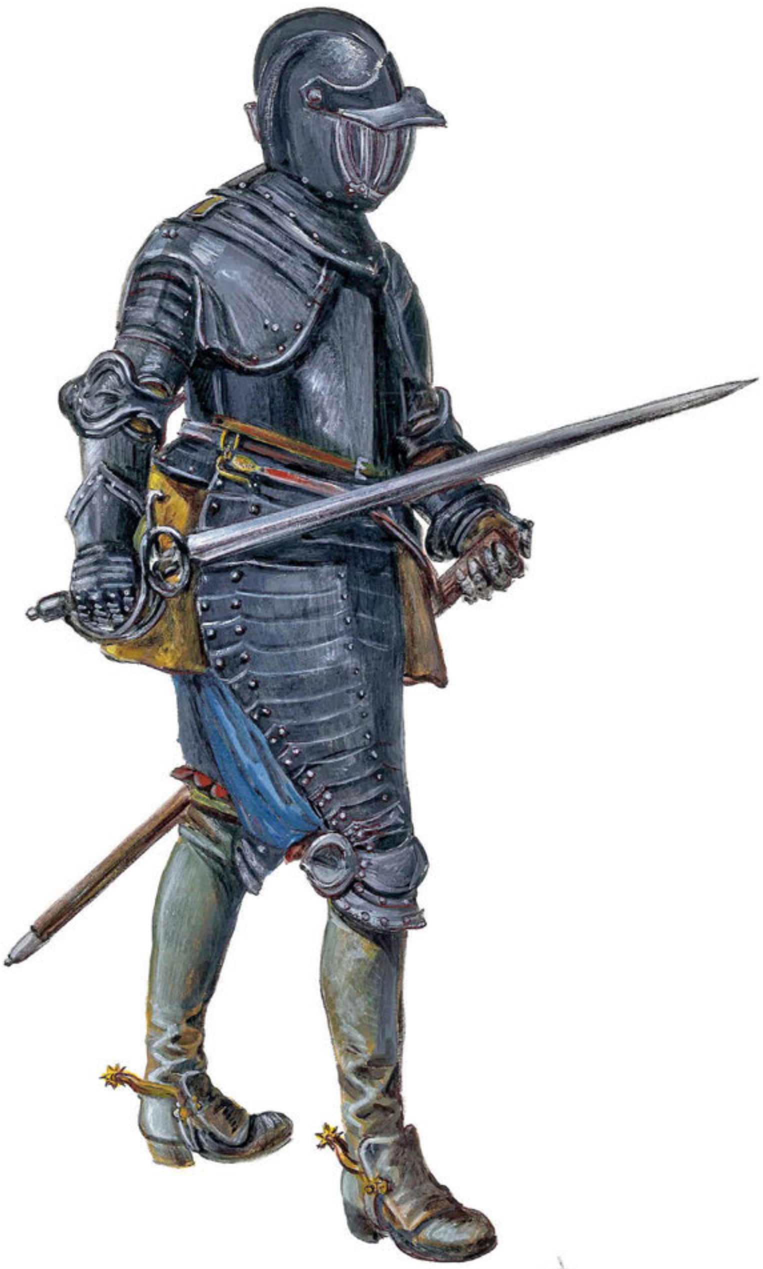
[18] Quoted in Medick and Marschke, p.76.

[19] Quoted in Medick and Marschke, p.76.

[20] Quoted in Medick and Marschke, pp.80–81.

Plate A

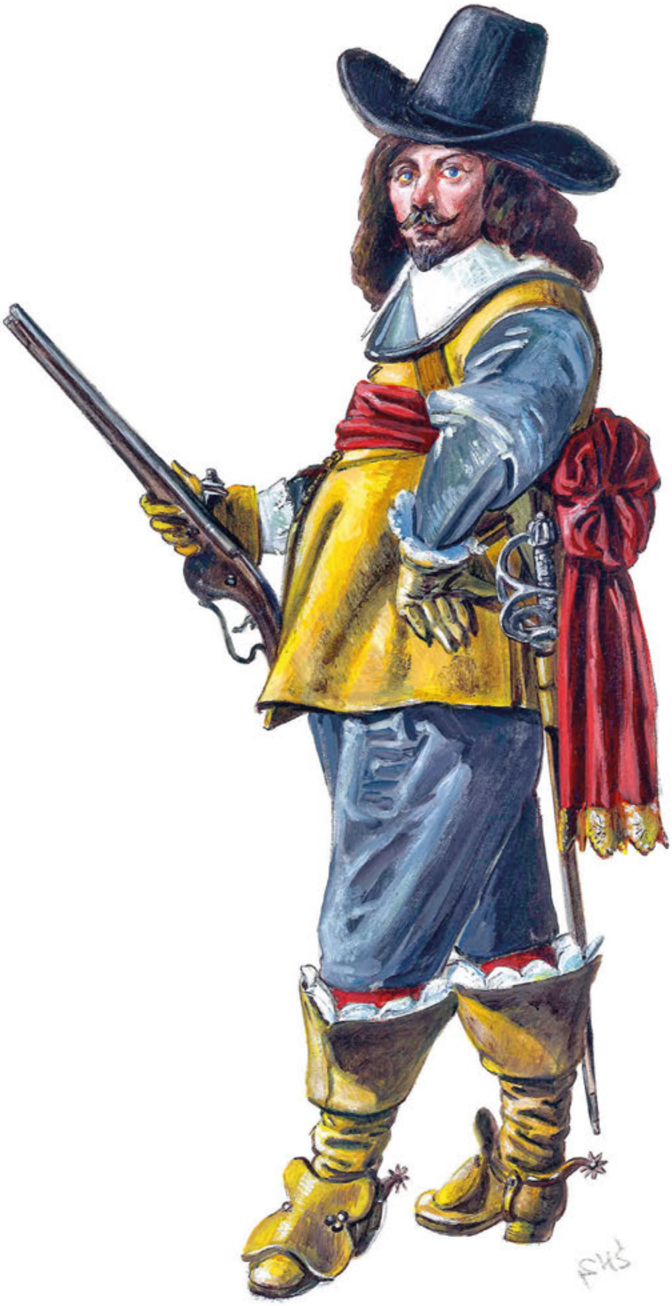


Cuirassier

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate B

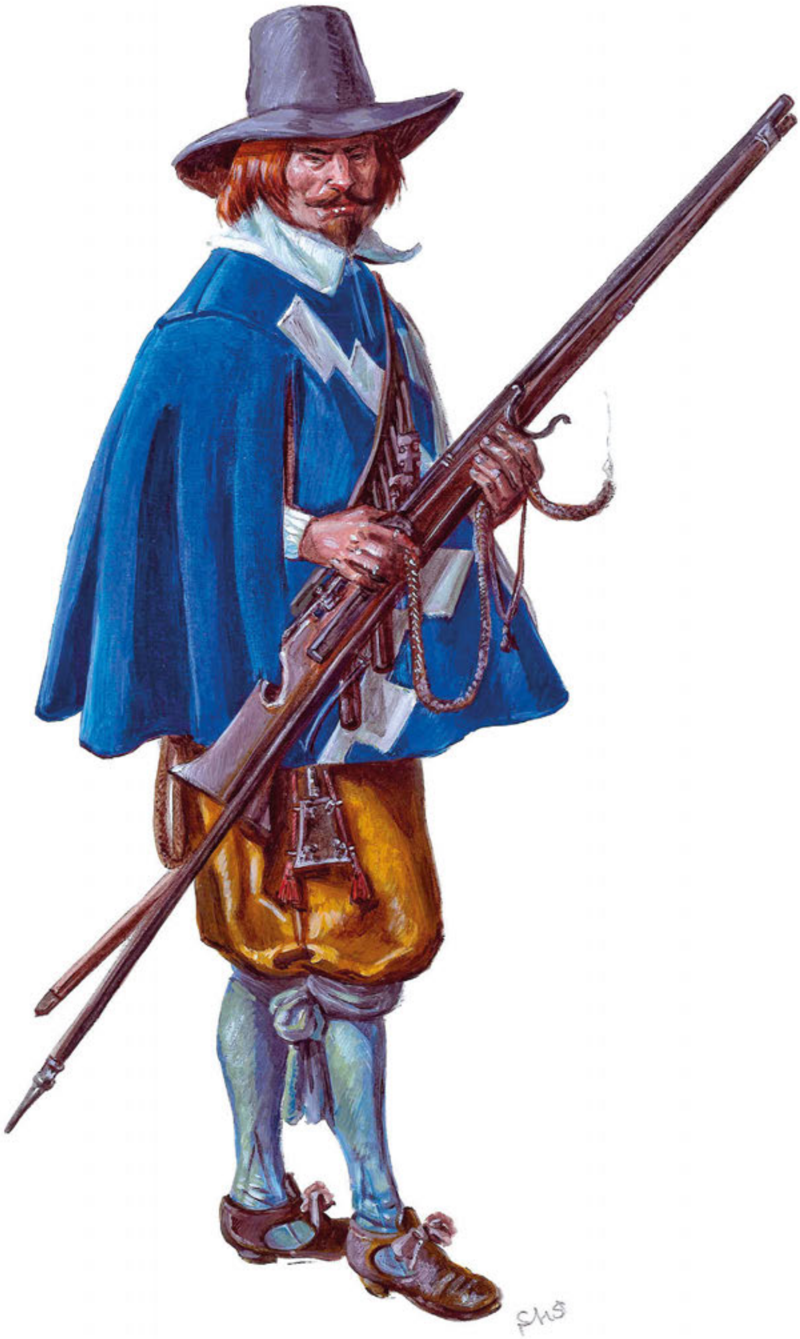


Harquebusier

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate C

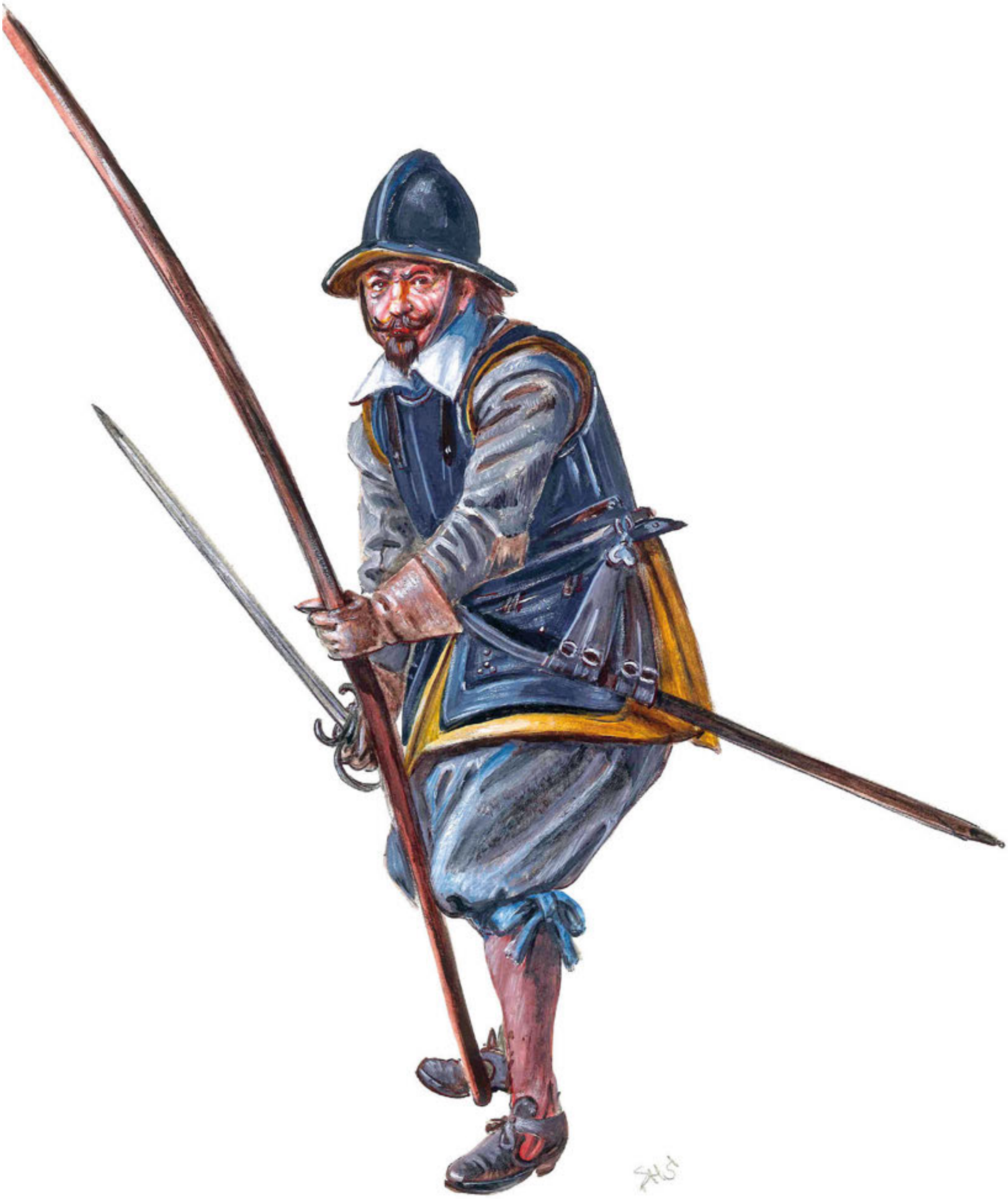


Musketeer

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate D

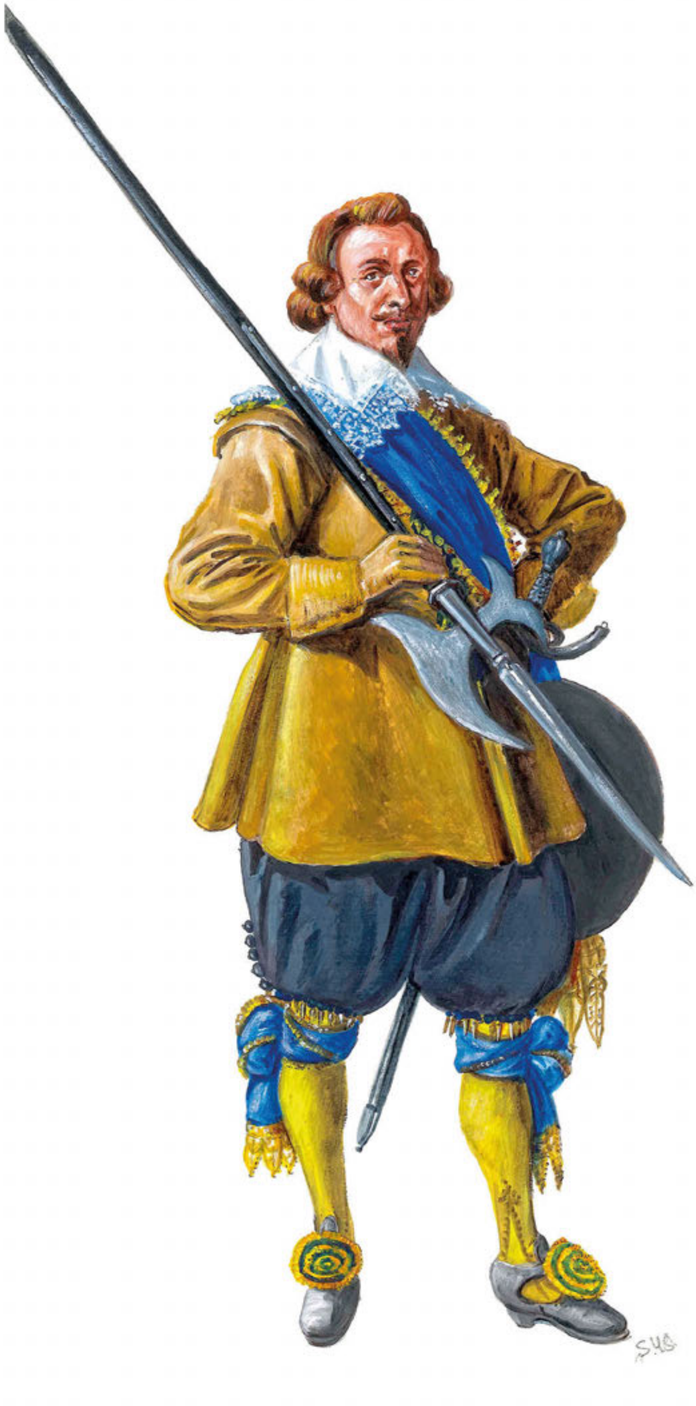


Pikeman

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate E

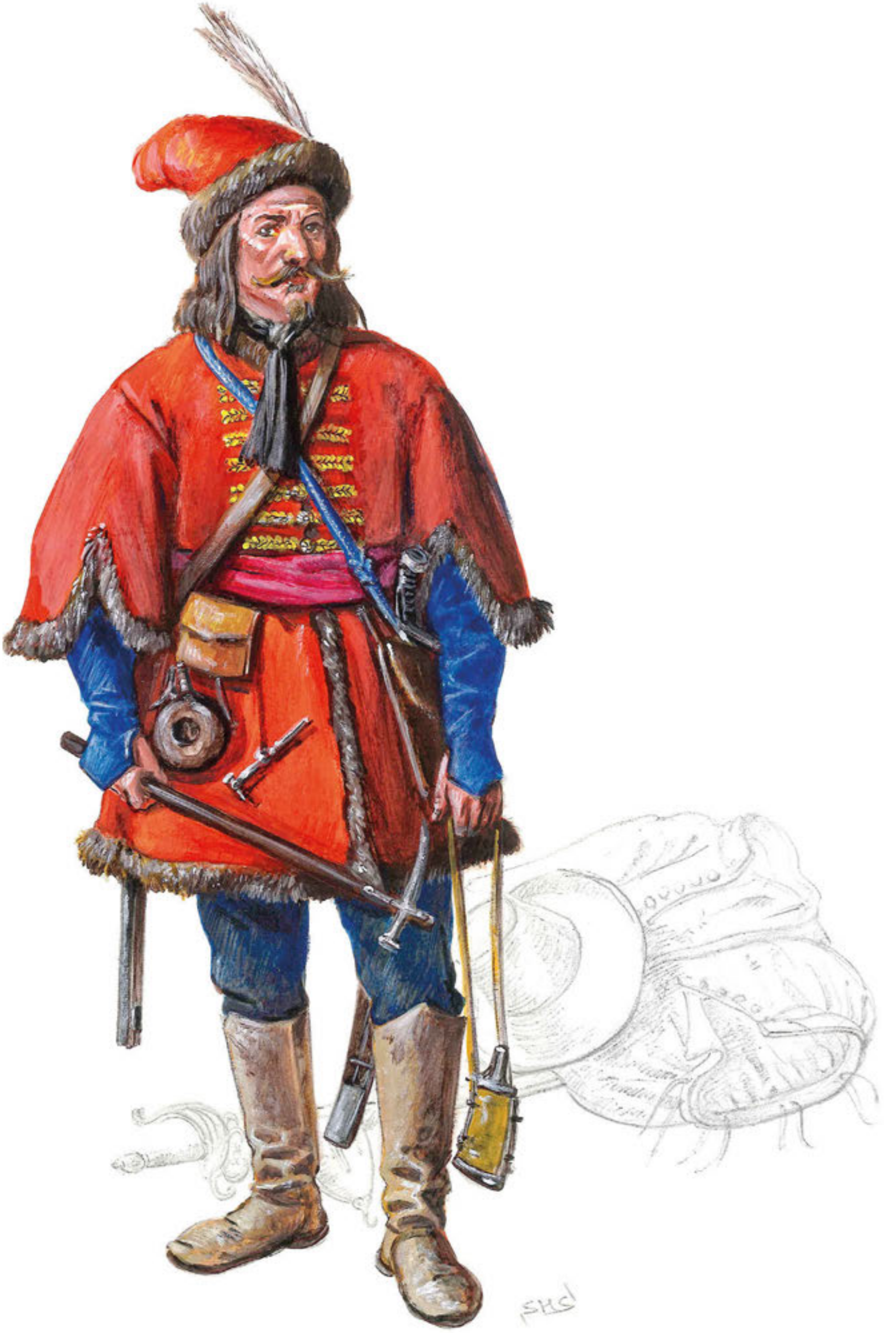


Officer

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate F



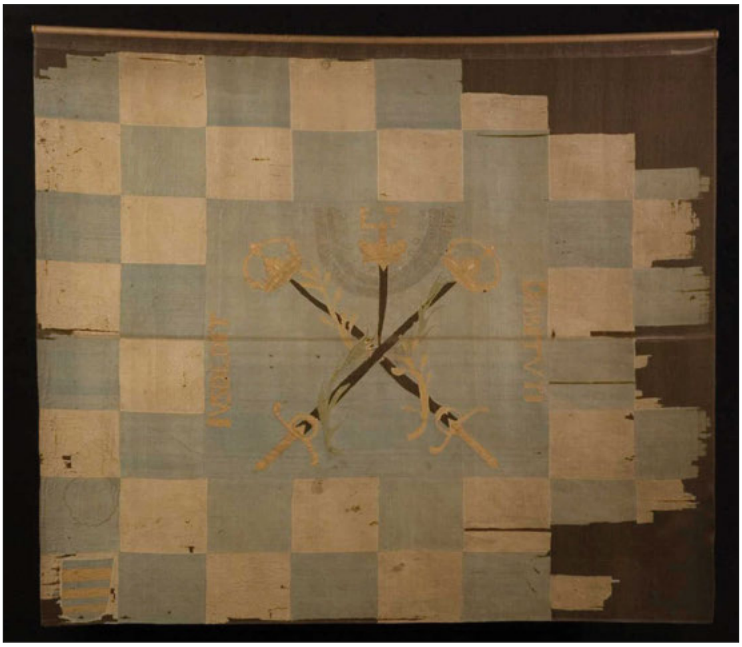
Croat

(Illustration by Sergey Shamenkov © Helion & Company)

See Colour Plate Commentaries for further information.

Plate G

Bavarian Standards from the Armémuseum in Stockholm



Above: Bavarian infantry flag. Original size: width of 202.0 cm, height of 174.0 cm. (Armémuseum accession ST 14:15)

Below: Infantry flag of the Irish company in Bavarian service – hence St Patrick and date of recruitment (1626). Captured by the Swedes at Oldendorf in 1633.

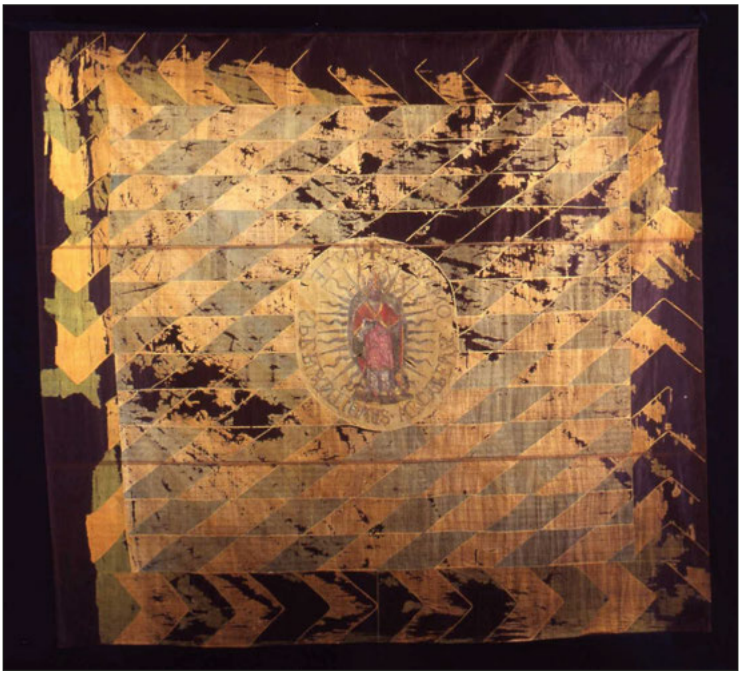
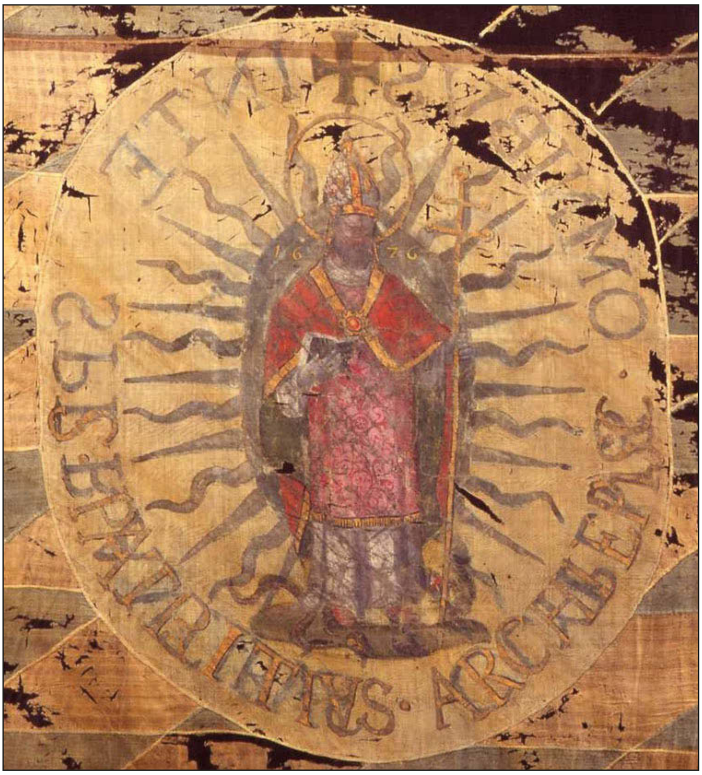


Plate H



Close-up of both
sides of infantry flag,
Plate G.

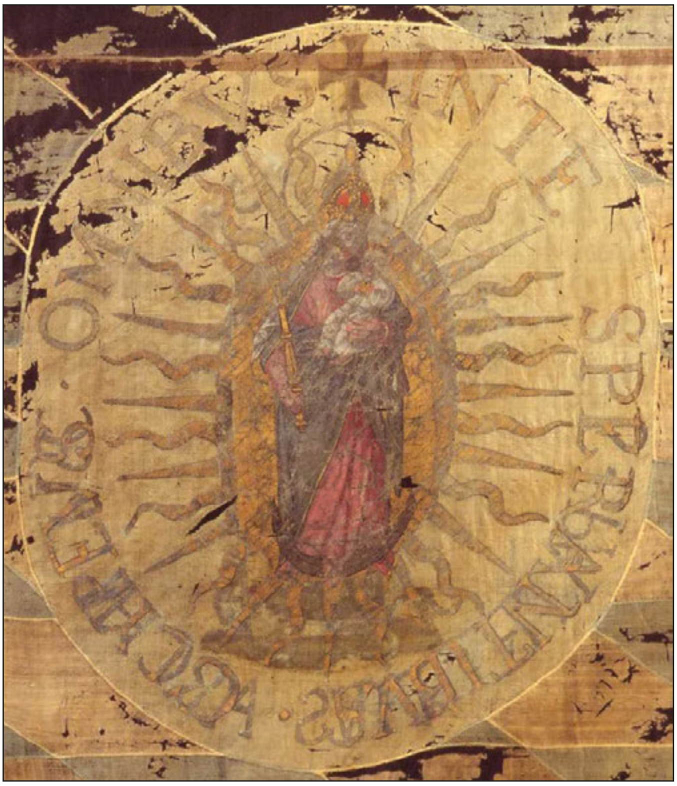
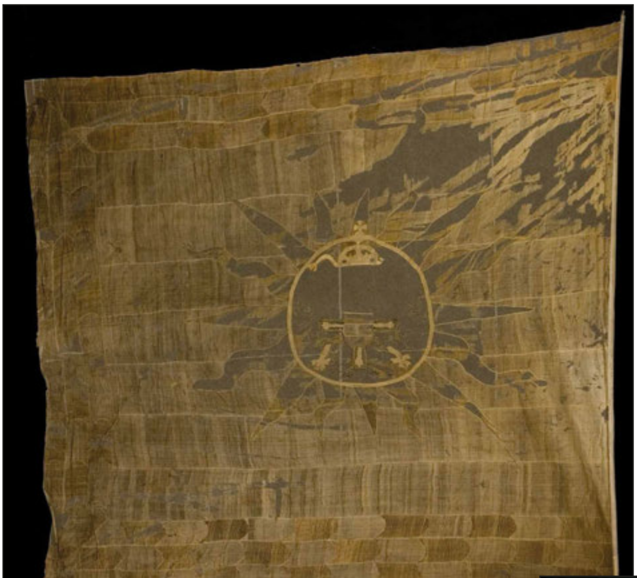
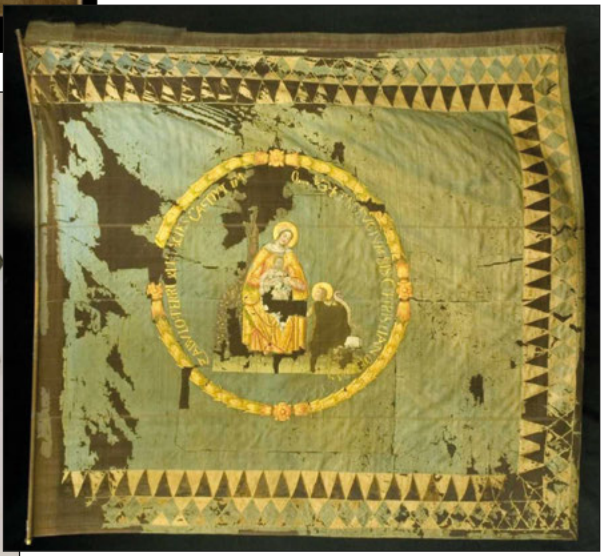


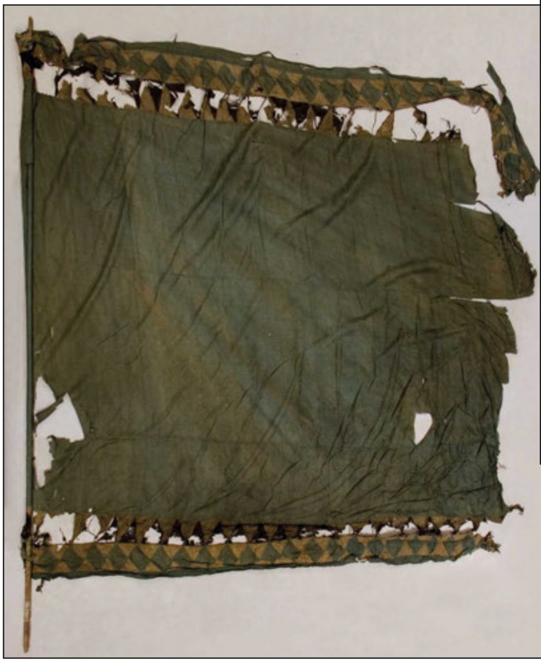
Plate I



Left: Flag of Archbishop Leopold Wilhelm's infantry regiment, captured by the Swedes during the second Battle of Breitenfeld in 1642. Original size: width of 333.0 cm, height of 333.0 cm. (Armémuseum accession no. ST 10:295-300)

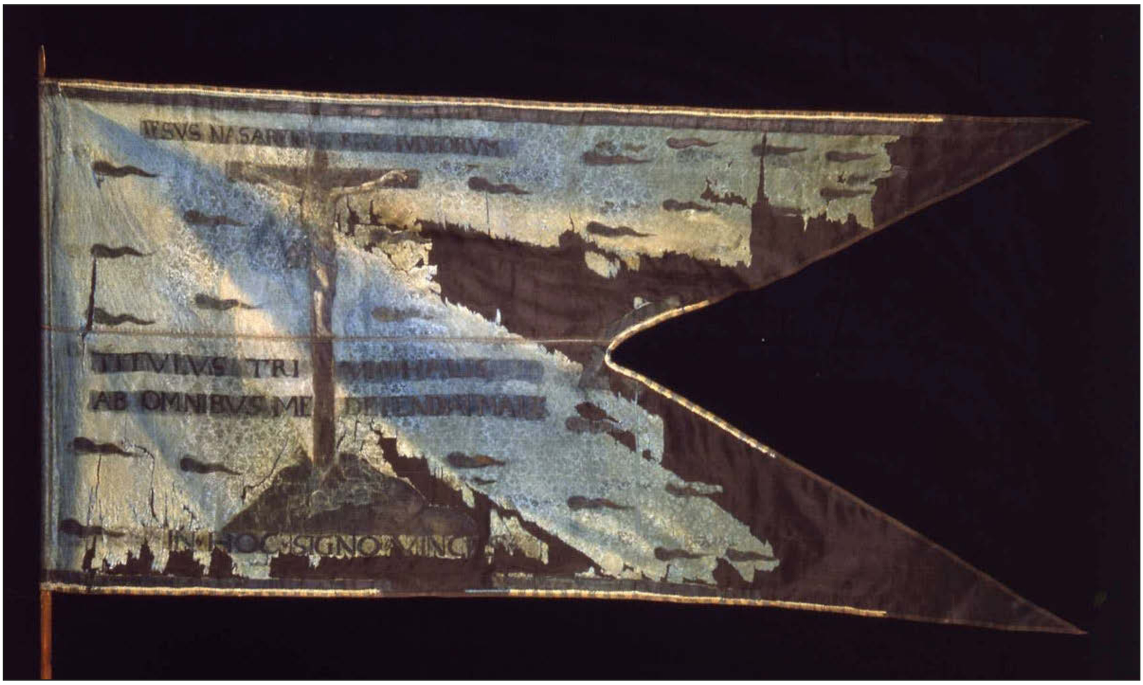


Above: Bavarian infantry flag. Original size: width of 284.0 cm, height of 269.0 cm and length of 267.0 cm. (Armémuseum accession no. ST 14:3)



Above; Bavarian infantry flag captured by the Swedes in 1633. Original size: width of 250.0 cm, height of 240.0 cm and length of 277.0 cm. (Armémuseum accession no. ST 14:8)

Plate J


IESVS NASARENVS REX IVDEORVM
TITVLVS TRIVMPHALIS
AB OMNIBVS ME DEFENDAT MALIS
IN HOC SIGNO VINCES

Bavarian dragoon guidon probably captured by the Swedes before 1634.
(Armémuseum accession no. ST 15:243,1)

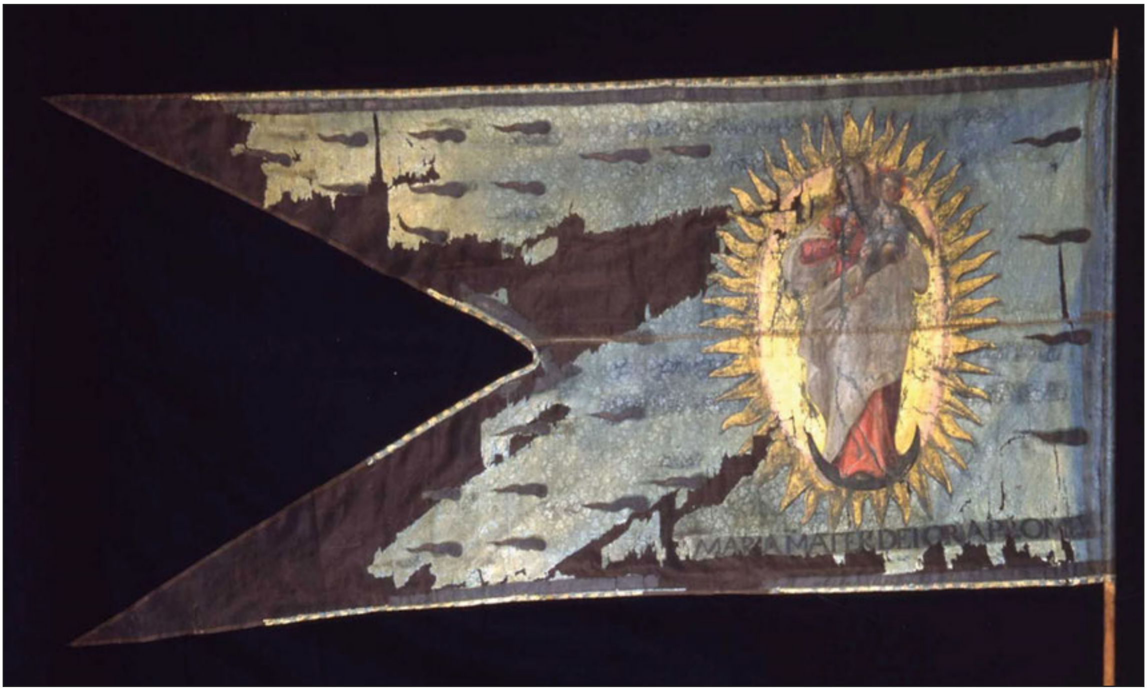
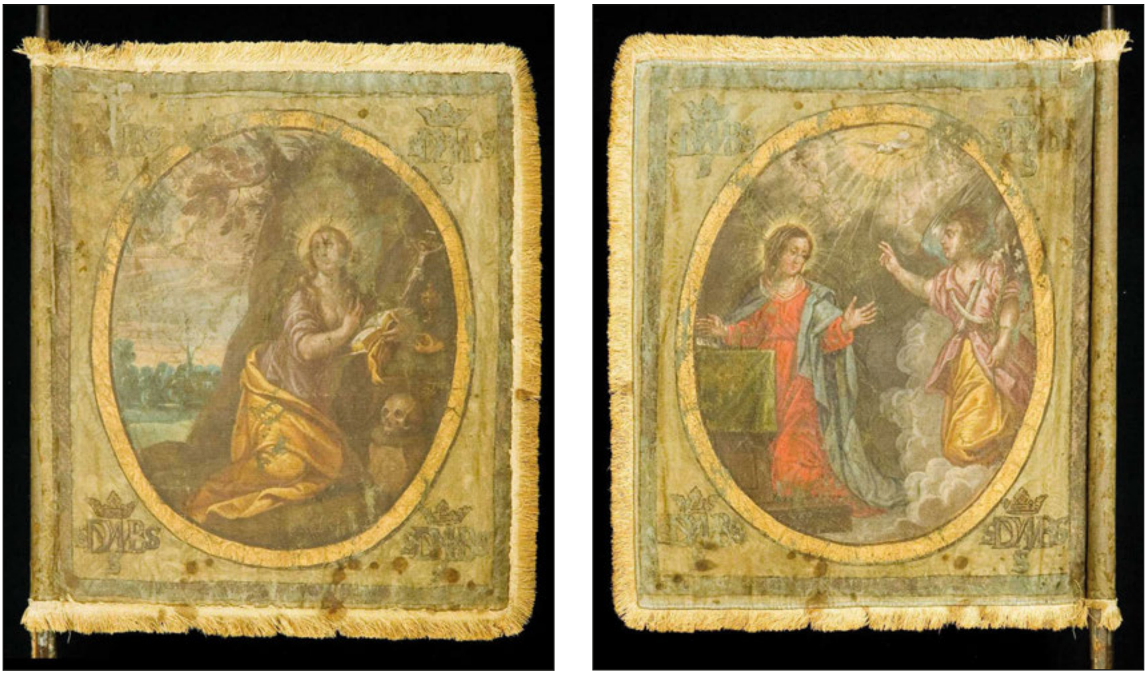

MARIA MATER DEI ORA PRO NOBIS

Plate K



Cavalry colour, unknown unit. Below: close-up of monogram. (Armémuseum accession no. ST G.7)

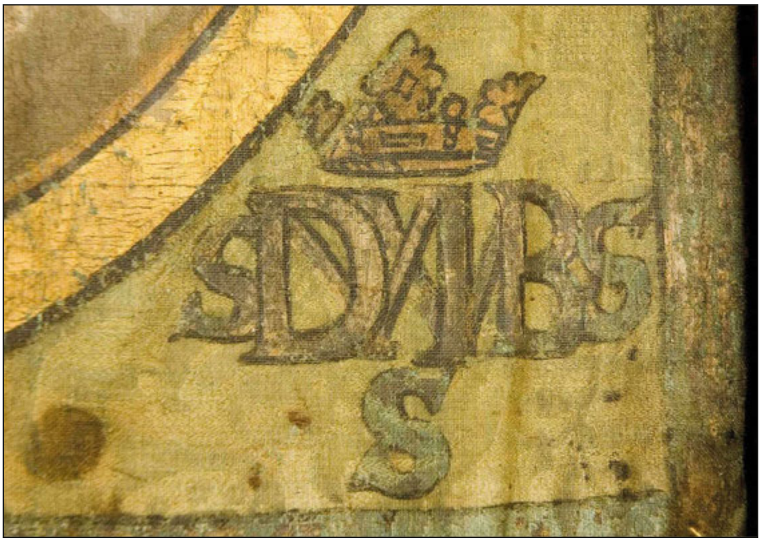
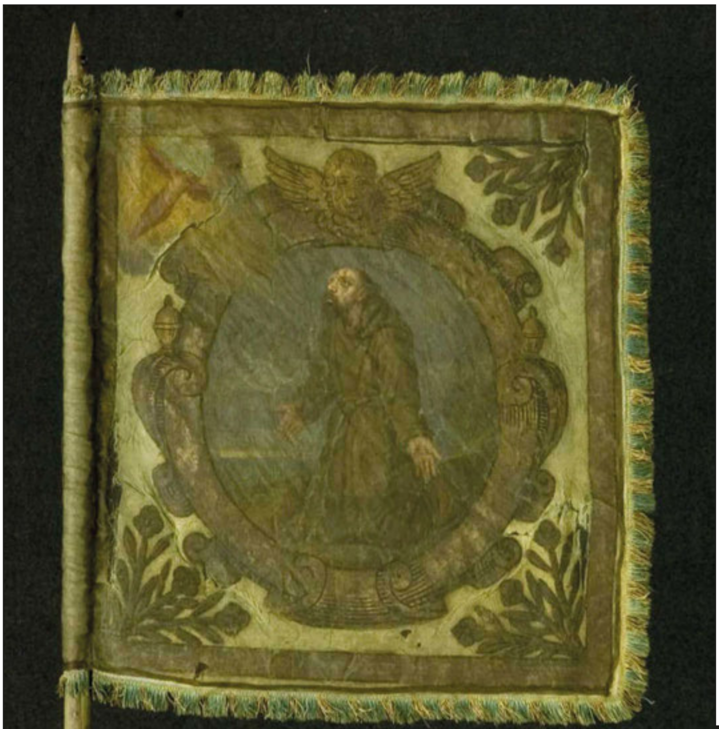


Plate L



Cornet of Bavarian or Imperial cavalry unit. (Armémuseum accession no. ST 15:208)

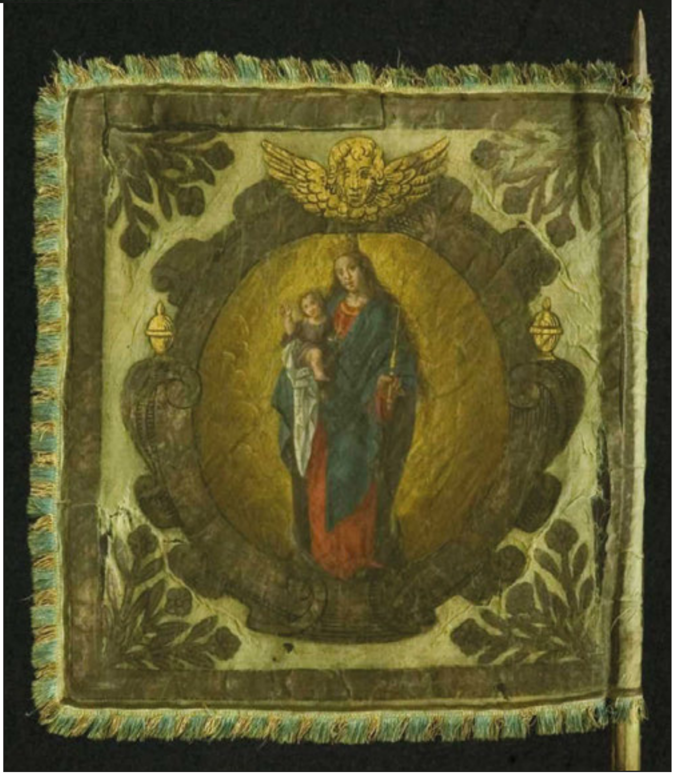
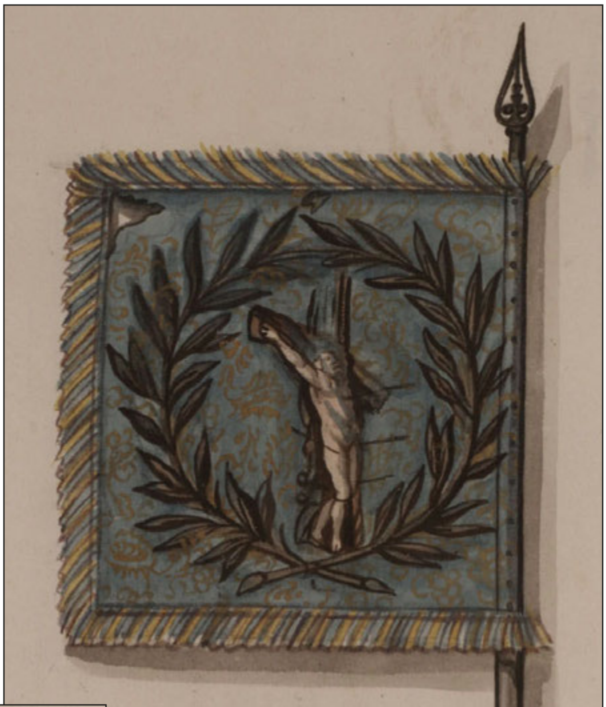
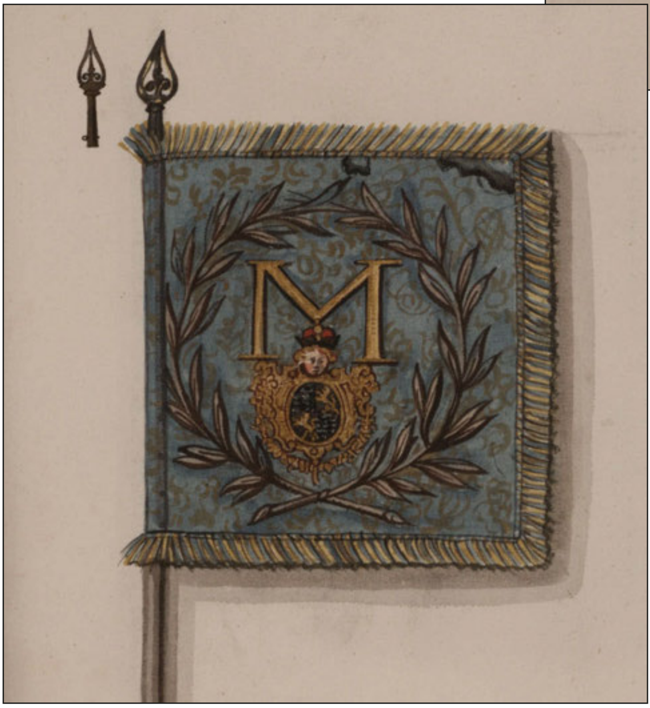
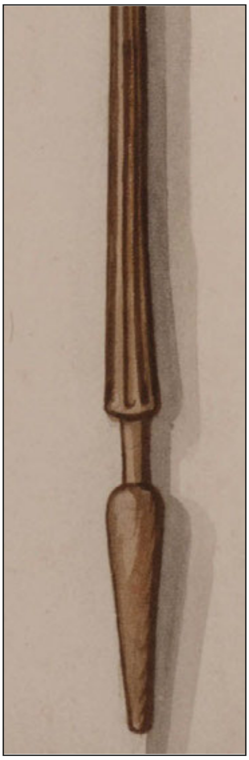


Plate M



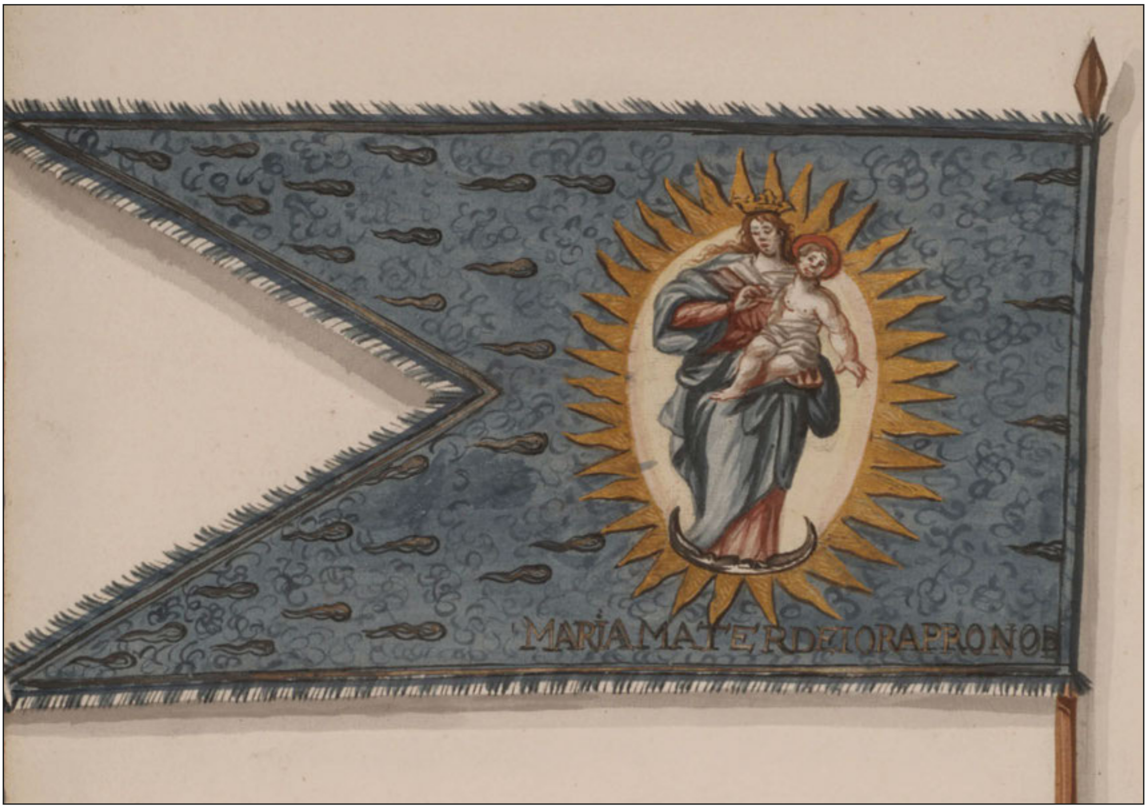
Below, right, and Plate N: cavalry cornets from an unknown Bavarian cavalry unit, seventeenth century. Olof Hoffman's drawing from the original.





Left: shaped lower end of flag pole

Plate N


MARIA MATER DEI ORA PRO NOB

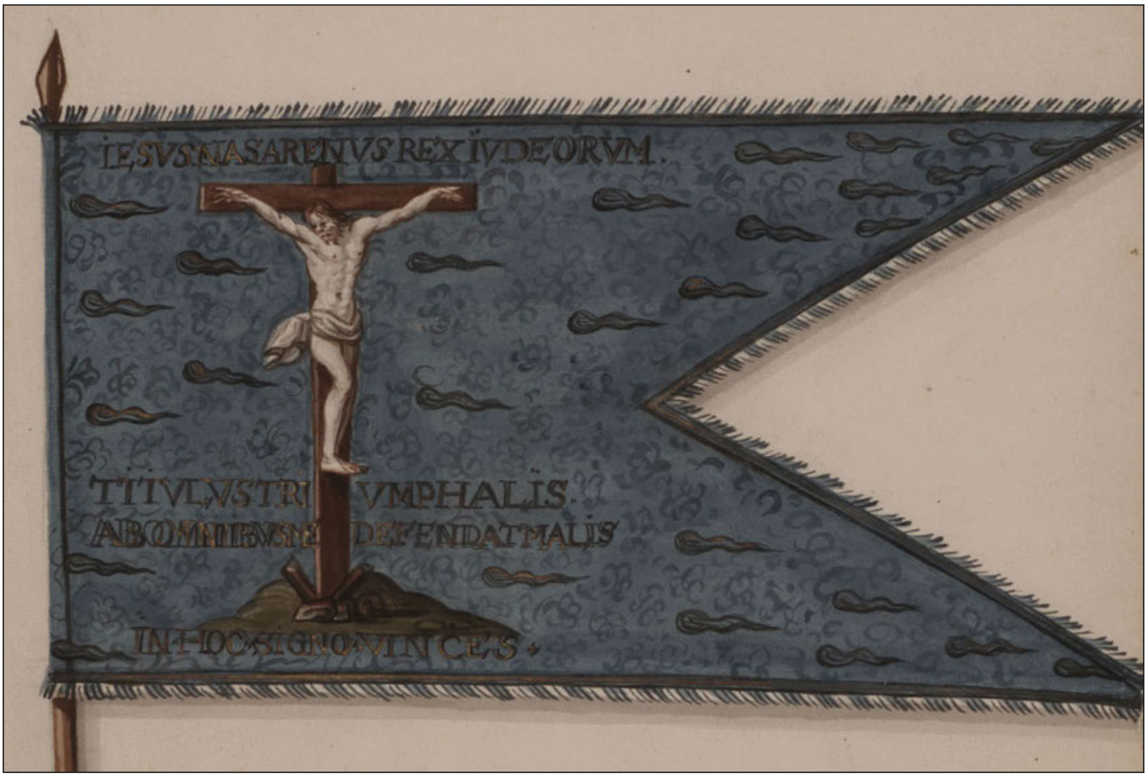
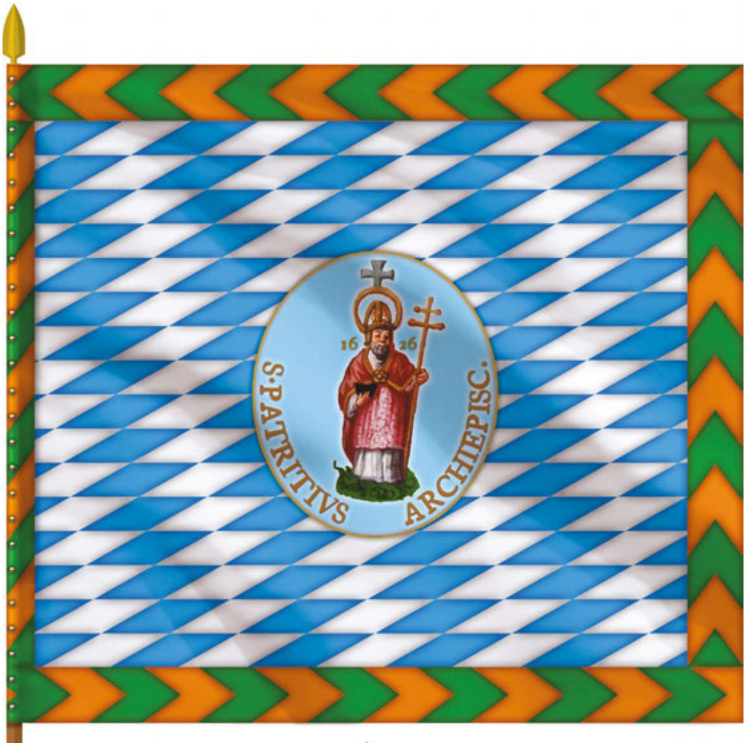
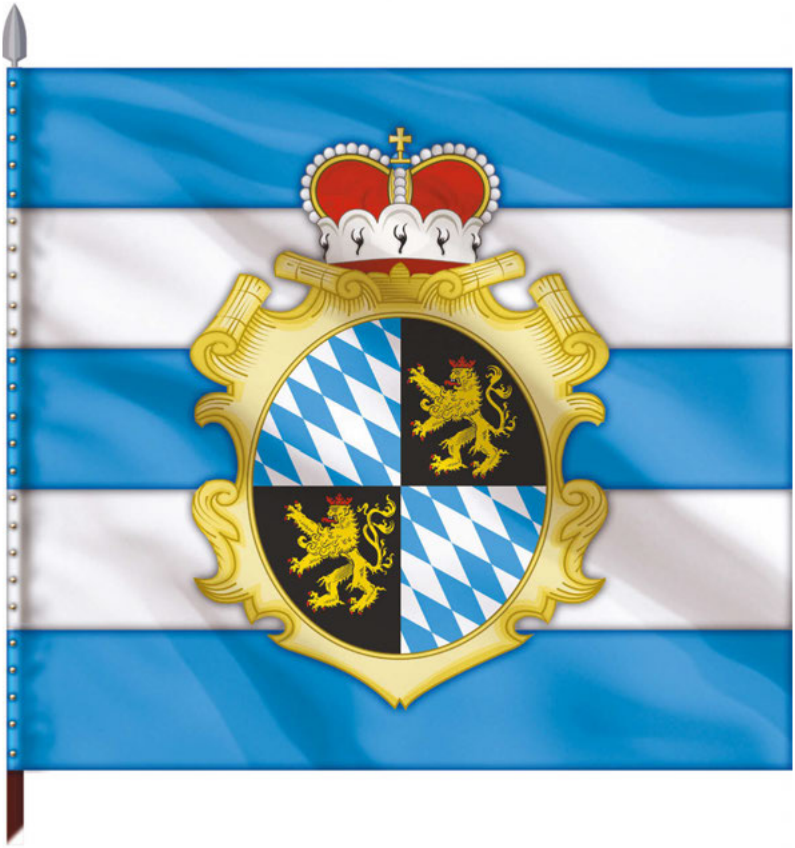

IESVS NASARENVS REX IVDEORVM.
TITVLVS TRIVMPHALIS.
AB OMNIBVS NE DEFENDAT MALIS
IN HOC SIGNO VINCES.

Plate O


16 26
S·PATRITIVS ARCHIEPISC.

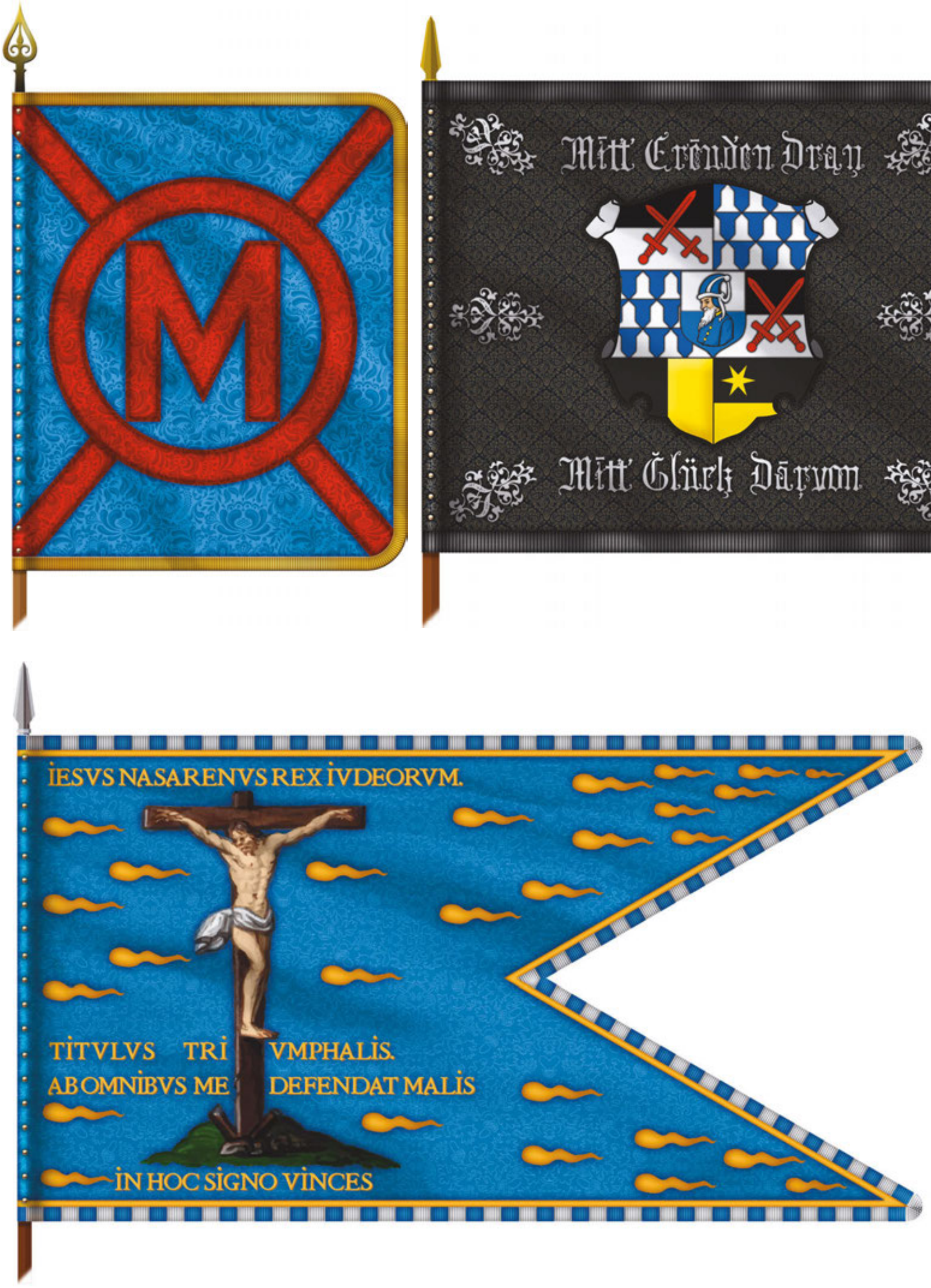


Infantry Colours

(Illustrations by Mats Elzinga © Helion & Company)

See Colour Plate Commentaries for further information

Plate P


M
Mitt Freuden Dran
Mitt Glück Darvon
IESVS NASARENVS REX IVDEORVM.
TITVLVS TRI VMPHALIS.
AB OMNIBVS ME DEFENDAT MALIS
IN HOC SIGNO VINCES

Cavalry and Dragoon Cornets

(Illustrations by Mats Elzinga © Helion & Company)

See Colour Plate Commentaries for further information

10

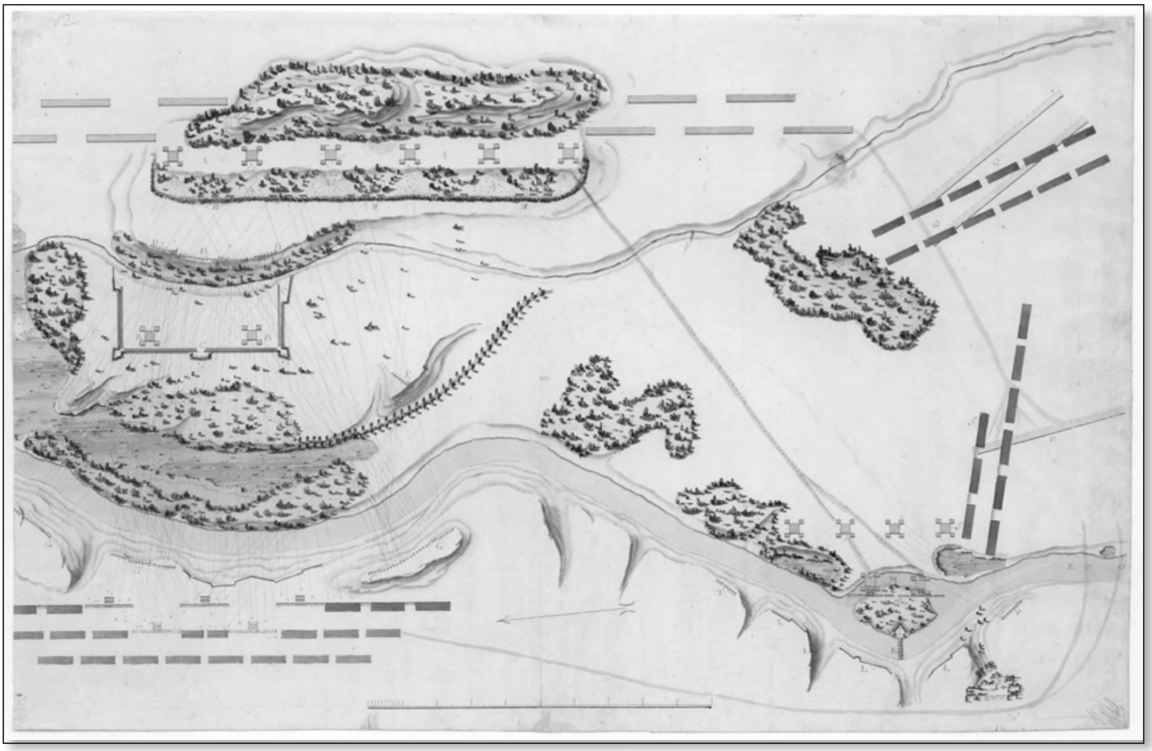
Tactics

At the beginning of the Thirty Years' War there were two schools of thought when it came to tactics: the Spanish and the Dutch schools, and later the Swedish school. The Spanish school has traditionally been seen as attacking in great lumbering formations which squandered firepower, whereas the formations used by the Dutch, and later the Swedes, have been seen as modern and progressive.

Infantry Tactics

The Swedish school has its origins in the Dutch system during the "Twelve Years' Truce" and was adopted by the Danish, before Gustavus Adolphus "introduced" it to the battlefields of Germany, in what would become known as the "Swedish Brigade". True, the differences between these formations were that the Swedish infantry drew up in six deep, whereas the Dutch were in eight or 10 deep formations, but the brigade system – one regiment or battalion forming the front with its musketeers forming behind the pikes and two other battalions protecting the flanks, with the musketeers on the right or left wing depending on where they were in the formation – proved too complicated for inexperienced soldiers. Therefore by the middle of the 1610s the Dutch had reverted back to their old system, whereby the muskets drew up on each side of the pike block and one or more battalions supported each other as a brigade. However, the Swedish Army appears to have abandoned the "Swedish Brigade" only after their defeat at the battle of Nördlingen in 1634. It did make a brief reappearance in 1642 at the battle of Edgehill during the English Civil War, when Prince Rupert insisted the Royalist infantry deploy in this fashion, although afterwards the Royalists adopted the Dutch formation, which they originally intended to do before Rupert's interference.

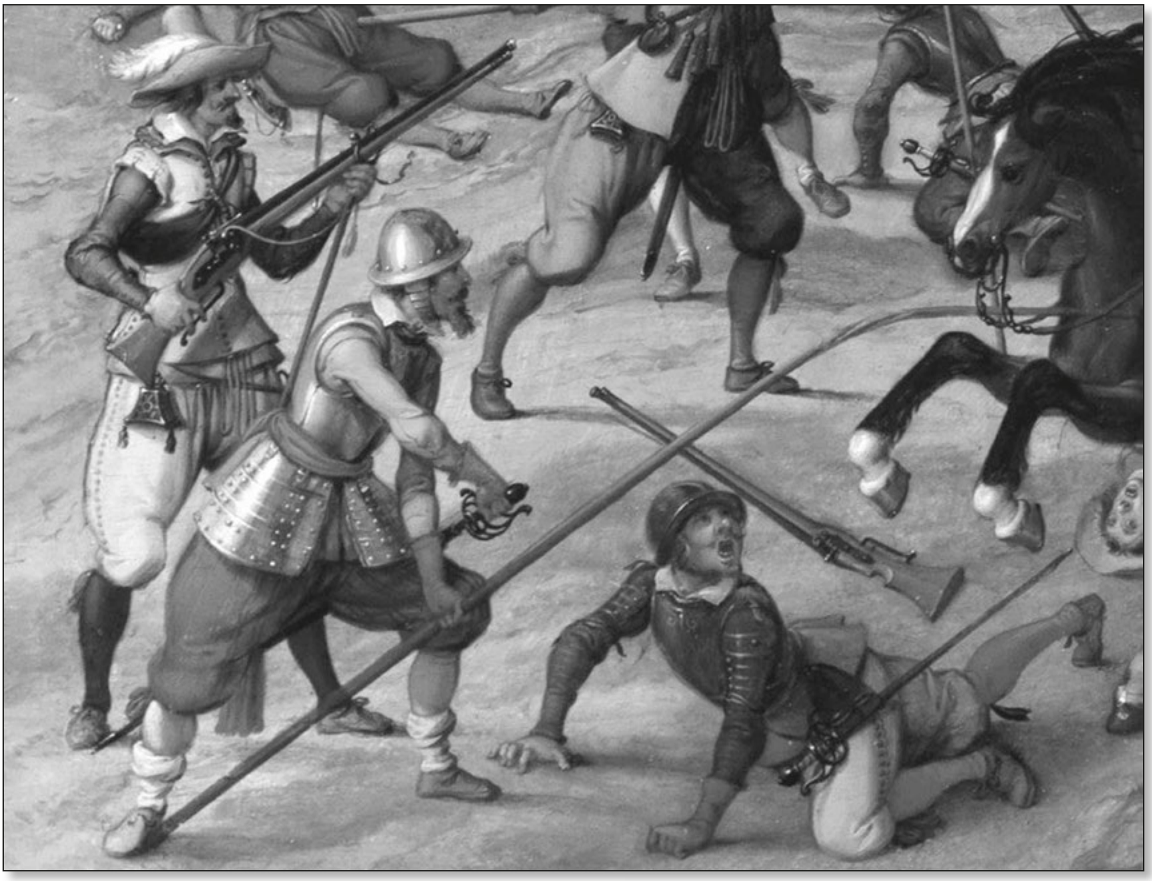
The Catholic armies, and some Protestant ones, used larger formations which had proved very effective since their introduction during the fifteenth century when the Swiss pikemen ruled the battlefield; up to the battle of Breitenfeld in 1632 they had swept all before them. These formations are traditionally known as "tertios", but there is no contemporary evidence to confirm the name. When Johann von Wallhausen wrote a treatise on



The battle of Rain (Lech) in 1632. The Swedes under the cover of artillery cross the River Lech. (Riksarkivet)

infantry tactics, based on his experience during the sixteenth century, he never refers to the formations by that name nor in the French translation of his work. Instead they are referred to as regiments, and it is clear from Spanish sources, such as Barroso's *Teoria Practica y Exemplos* written in 1628, that when Wallhausen refers to "tertios" he is referring to the tactical unit, rather than the name of the formation.

Other contemporary writers refer to these large formations as "battles", "squadrons" or "battalions". In his book *A Discourse of Military Discipline* published in 1634 and dedicated to King Philip IV of Spain, Gerat Barry mentions four types: a large "battle square", which could be composed of between 1,000 to 10,000 men, a smaller "squadron square", which appears to be formed of fewer than 1,000 men and a "cross battle" which was formed by about 1,500 men divided into four groups and was formed in the shape of a cross. However, although Barry refers to them as squares, some were more rectangular in shape having between 61–72 files by 26–31 ranks depending on how many infantry a general had and how many formations he required. The fourth formation Barry suggests is the "triangle battle" whereby one man was in the first rank, three in the second, five in the third and so on. Unfortunately he does not say why this formation should be used, and probably it was never used on the battlefield. Extra musketeers could be drawn up in squadrons at the four corners of the formation and sometimes on its flanks. Barry also shows a "squadron square" with a hollow centre,



A pikeman and a musketeer during a skirmish. From a painting by Sebastiaen Vrancx, clearly based on de Gheyn. (Michał Paradowski's archive)

presumably where the musketeers and perhaps other persons could retire if the formation was attacked by cavalry.[1]

Writing a few years after Gerat Barry, Raimondo Montecuccoli records that the infantry formations had:

> Customarily been formed in five different ways. 1. A square of men; 2. A terrain rectangle; 3. a double square; 4. an oblong rectangle; and 5. a rectangle the horizontal and vertical dimensions of which are determined according to a given ratio, the space which each soldier takes up marching in battle three feet in breath and seven in depth.

These formations are similar to those mentioned by Sieur Du Praissac in 1614, whose work was translated by John Cruso and published in English in 1639.

To form a regiment into a square formation was usually the job of the regiment's major; he had to know the number of men he had at his command

---

[1] Gerat Barry, *A Discourse of Military Discipline* (Brussels: 1634), p.125. He sometimes refers to these rectangular squares as "squadrons of board front".

and divide them by the square root, for example the square root of 100 is 10, which gives 10 ranks and 10 files. Any additional pikemen would be used to guard the colours.

However, Montecuccoli warns, "A battalion can never fight effectively if it has more than six or seven ranks. This is because the pikes are eighteen feet long. The hands occupy three feet of the shaft and thus the remaining part extends fifteen feet beyond the first rank. The second rank in addition to the space."[2]

Du Praissac does not give a preference for which formation was best, saying that, "the Spaniards often use double battalions, and the Hollanders broad fronted ones, that they make their files no deeper than 10 men". A double battalion had twice as many files as ranks, so a regiment of 2,000 men would have about 62 files and was 31 ranks deep, although Du Praissac gives a square root table for commanders with up to 4,096 men. He also recommended that the formation should have a larger frontage than its opponent, so if an infantry occupied three feet distance square then a formation of 2,000 men would be 186 feet long and 93 feet in depth.[3]

Montecuccoli continues:

> Large bodies of men are inconvenient because they require a very level battlefield: without the latter they cannot maintain good order. Nor can they function effectively on either their right or left flank; they can only fight frontally. Once they are routed, it is difficult to pull them together and repair the damage which is like that of a building that has collapsed and cannot be fixed unless it is completely reconstructed. Of course, it is quite true that to protect and salvage one's forces during a retreat or in order not to be attacked, such large solid and massive corps are quite useful. Since they are immobile and of little offensive value, yet are difficult to break, they do serve a purpose when one wishes to defend one's self.[4]

However, at the battle of White Mountain the Catholic League army did take the offensive against the Bohemians, who were arrayed at the top of the hill. Amongst the Spanish–Catholic League's army was Verdugo's Regiment, which "advanced with fine resolution up to four pike lengths" from the enemy before the musketeers gave fire. This, and no doubt the sight of the battalion, made the Bohemians "take fright and began to retreat, and so the right platoon gained the crescent and the left the battery".[5]

Christian of Anhalt also recorded that the Bohemian Army panicked at the sight of the advancing enemy: "As soon as the enemy arrived about 300 or 400 paces from Count Thurn's Infantry, our soldiers started to shoot

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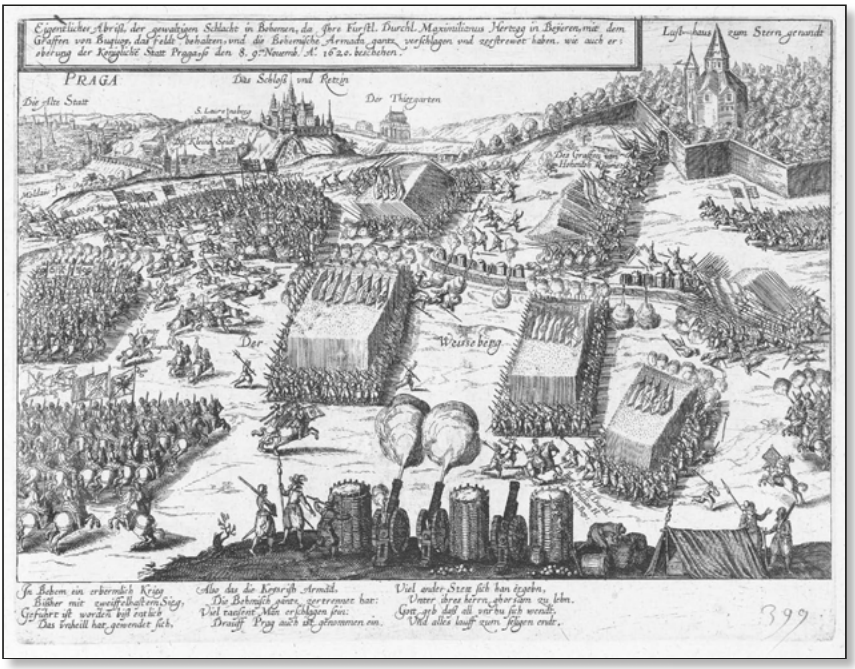
[2] Barker, p.90.

[3] Sieur Du Praissac, *A short method for the easie resolving of any militarie question propounded, translated by John Cruso* (Cambridge: Roger Daniel, 1639), pp.28, 196–201.

[4] Barker, p.90.

[5] Louis De Haynin, Seigneur du Cornet, *Histoire Générale des guerres de Savoie, de Bohême, du Palatinat & des Pays-Bas, 1616–1627* (Brussels: C. Muquardt, 1868), vol. 1, p.175.


Eigentlicher Abriß der gewaltigen Schlacht in Behemen, da Ihre Fürstl. Durchl. Maximilianus Hertzog in Beÿeren, mit dem Graffen von Buquoy, das Feldt behalten, vnd die Behemische Armada gantz verschlagen vnd zerstrewet haben. wie auch eroberung der Königliche Statt Praga, so den 8. 9.ber Nouemb. Aº. 1620. beschehen.
Lust-haus zum Stern genandt
PRAGA
Die Alte Statt
Das Schloß vnd Retzin
Der Thiergarten
S. Laurentzberg
Die Kleine Seidt
Moldaw flu
Des Graffen von Hohenloh
Der
Weisseberg
In Behem ein erbermlich Krieg
Bißher mit zweiffelhafftem Sieg,
Gefuhrt ist worden biß entlich
Das vrheill hat gewendet sich.
Also das die Keÿsrisch Armad,
Die Behmisch gantz zertrennet hat:
Viel tausent Man erschlagen sein:
Drauff Prag auch ist genommen ein.
Viel ander Stett sich han ergebn,
Vnter ihres herrn ghorsam zu lebn.
Gott geb daß all vnrhu sich wendt.
Vnd alles lauff zum seligen endt.
399

The battle of White Mountain in 1620. Workshop of Frans Hogenberg 1620–1622. (Rijksmuseum)

without order or sense and, even against expressed ordered, shot in the air and immediately started to flee, seemingly in the grip of fear."[6]

This is not the only account of these large formations of infantry advancing. In his account of the battle of Breitenfeld, on 17 September 1631, the Swedish officer, General Horn, describes Tilly's infantry:

> The main battle of the enemy which comprehended the whole force of his infantry and was parted into four great Spanish Battalions (consisting of 16 regiments) marched down the hill with the cavalry which stood on the right and left hand thereof and being sorely galled with the artillery discharged from our left wing they changed their station, in such a manner as that the most of them fell upon the Elector's [of Saxony's] Army.[7]

True, other regiments met with mixed success at the battle of White Mountain, and at Breitenfeld Tilly's army was routed, but Anhalt's and Horn's accounts clearly show that these large formations did have an offensive capability. Moreover, Napoleon would rely on dense columns when he attacked enemy positions during the Napoleonic Wars, which dwarfed those used during the Thirty Years' War and had the same effect on the enemy's morale.[8]

The "Spanish formation", whereby the musketeers either deployed on the flanks of the pike block or surrounded the pikemen, made it easier for them to take shelter if they were attacked by cavalry, whereas the Dutch and

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[6] Letter from Christian of Anhalt to Frederick V, quoted in Peter Wilson's *The Thirty Years War: A Sourcebook*, p.65.

[7] TNA, SP 95/3 f.121, General Horn's Account of the battle of Leipzig, 7/17 September 1631.

[8] Apart from the British, who adopted their own countermeasures by firing in ranks of two or three.

Swedish formations required the regiment to form a square, which took time. At the battle of Lützen the Swedish Blue Regiment was surprised by Imperialist cavalry on its flanks while engaging the enemy's infantry to its front, and was cut to pieces.

When these formations advanced upon the enemy's infantry, according to Gerat Barry:

> Coming within reach of the musket then the first ranks of the wings of musketeers are to march in this manner; the first ranks stepping some two or three paces forward having cocked their matches, then with readiness and expedition all those of the first ranks (their muskets being upon their rests or forks) to discharge at once, permitting other ranks to proceed, then presently those of the second rank to step up before the first rank, as the battle or battalion do march, and so to discharge as their former fellows had done before, and then the third rank before the second and the four, before the third, and so all the other ranks consequently with this kind of double march and at the train of the last rank those of the first to follow up again, and so consequently the rest. But if chance that the squadron of pikes be distressed or constrained to retire, they are to discharge at the enemy, retiring back upon a counter march, and with speed fall back into their rank, to give place to the next ranks, and no time be idly employed.[9]

It is generally believed that Gustavus Adolphus introduced the practice of firing by three ranks in a "Swedish volley". However, the English writer Gervase Markham, in his 1625 drill book, also mentions firing by volleys which he describes as an "ancient and vulgar manner of discipline", because:

> In teaching to give volleys … (which is that the whole volley shall be given of all the shot in one instant as well of them behind as before [in front]) is utterly to be condemned for either the hindmost must venture to shoot their fellows before through the heads or else will over shoot and so spend their shot improfitably. Besides the volley being once given, the enemy comes on without impeachment or annoyance.[10]

However he does recommend volley fire when it comes to repelling enemy cavalry, when the musketeers are protected by their pikemen:

> So that the volley is given entirely and without impeachment or trouble to one … another. Whereas to shoot over one another's shoulder or by making the first man kneel, the second stoop, the third bend his body, the fourth lean forward and the fifth to stand upright and so deliver their volley both rude and disorderly, bringing great danger to the soldier and placing them in such a lame and uncomely posture.[11]

When advancing in a formation, Du Praissac advises:

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[9] Barry, p.134.

[10] Gervase Markham, *The Souldiers Exercise* (London: Lawrence Blaiklock, 1643), p.9.

[11] Gervase Markham, *The Second Part of the Soldiers Grammar* (London: A Matthews, 1627), p.23.

> That you must not give on so hastily … [by this] the Battalion be disordered … you are to use a marching pace until you come within a pistol shot by then to double your pace and to charge furiously the pikes being close to serried and the muskets continually playing on the flanks, having targeteers in front which may shelter the battalion and disorder the enemy pike.[12]

Unfortunately, when it comes to how the pikes performed in battle, the military manuals are silent apart from the action of repelling enemy cavalry. However, writing in 1591, William Garrard records that:

> When the soldiers are joined and closed in battle with their pikes and when they stand in term to fight … the battle is to close and join as straight together as is possible, in such sort as they may manage and bestir themselves with their weapons, without being an impediment one to another, to the intent that the ranks being straight in fighting, or that the soldiers be invaded by their enemies, or that they recoil by force of an onset, they need not to fall to the ground, but rather that they may by those ranks that be behind receive help, that under setting them with their breasts they may hold them straight up upon their feet.[13]

Sir John Smythe, writing in 1595, agreed with Garrard that the rear ranks should support the front ranks when it came to “push of pike”. When the pikes were:

> ready to encounter with another … letting fall the points of their pikes and carry them close breast high with both hands steadily and firmly, the points full in the faces of their enemies. And the second rank likewise straightening and closing themselves by rank and front and joining themselves to back of the first rank, and following them step with step carrying their pikes above hand over the shoulders of the first rank, the points of their pikes likewise towards the faces of the enemies.[14]

Once the pikemen come into contact with the enemy then Smythe suggests that they make a “pushing and foining [thrusting]” movement as they press forward without standing and “give a puissant thrust into the faces of the enemy and so force the front ranks onto the rear ones”.[15] Sir Thomas Kellie, writing in 1627, also states that, “When battles [that is, formations] come to push of pike, good commanders sayeth that your pikemen must not push by advancing and retiring their arm as commonly is done, but only go jointly on together without moving their arms”.[16]

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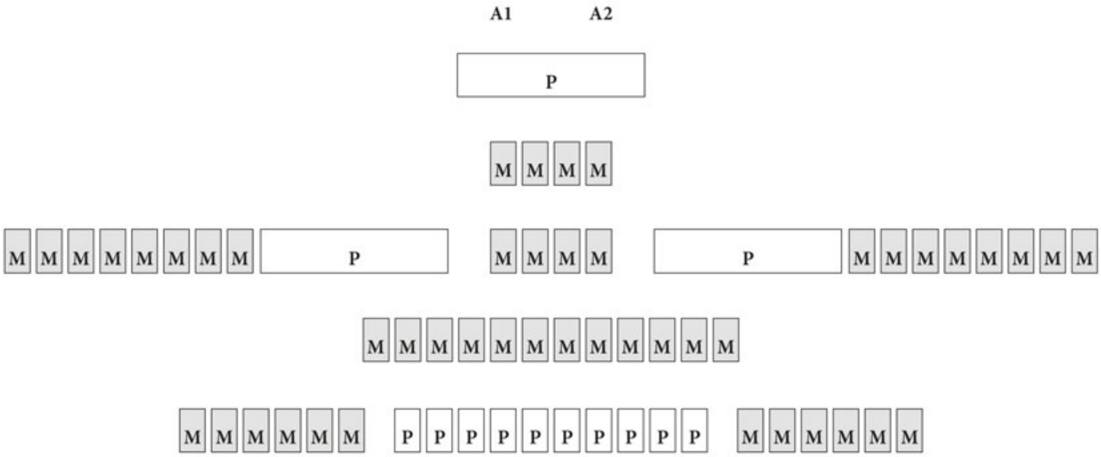
[12] Du Praissac, *A short method*, p.28.

[13] Garrard, p.219.

[14] Sir John Smythe, *Instructions, Observations and Orders Mylitarie* (1595), pp.23–27.

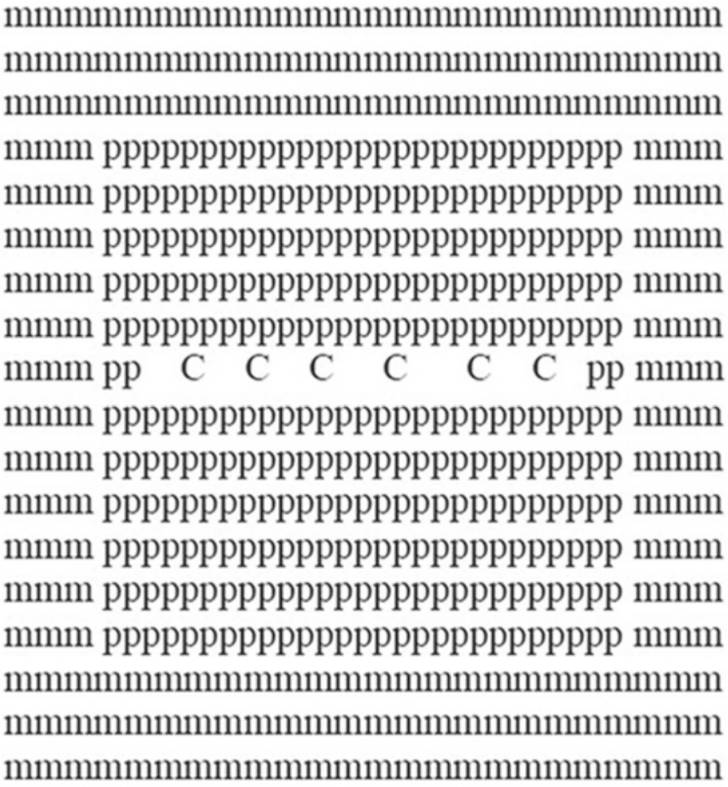
[15] Smythe, pp.23–27.

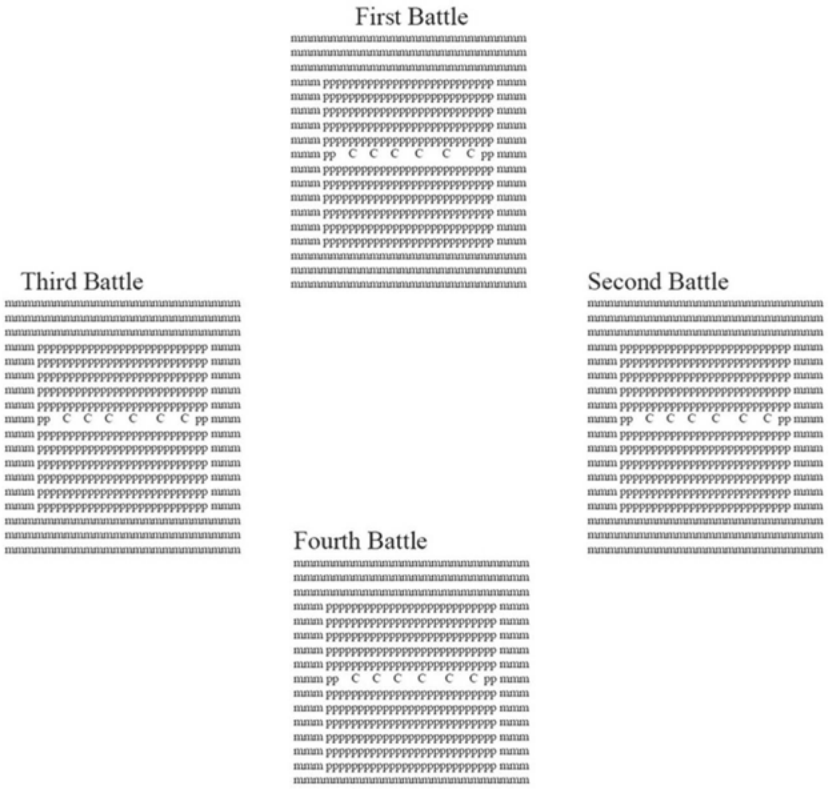
[16] Thomas Kellie, *Pallas Armata or the Art of Instructions for the Learned: and all generous spirits who effect the Profession of Arms* (Edinburgh, 1627), p.25.



Above: the “Swedish brigade” formation.

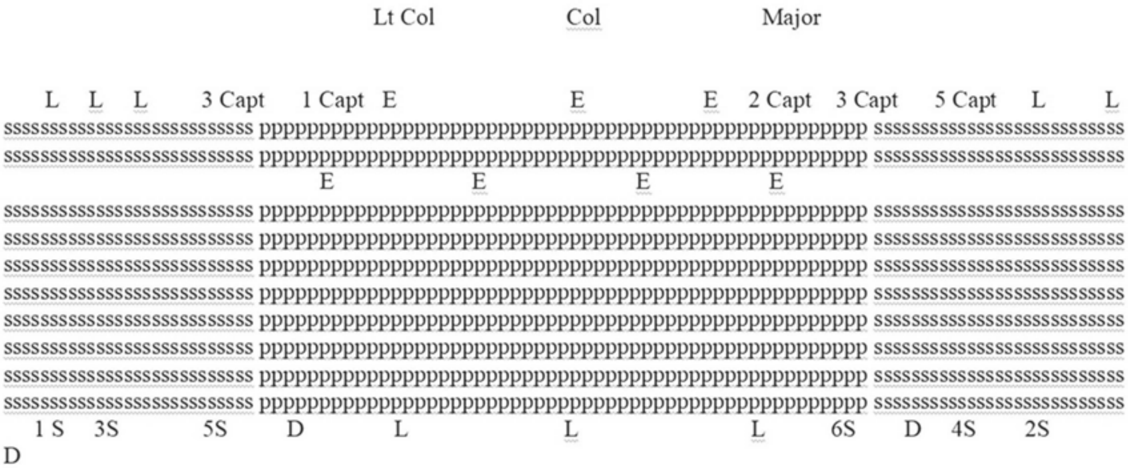
Below: a typical Spanish battalion used by the Bavarian Army at the beginning of the war (officers not included). M = musketeer P = pikemen C = colours

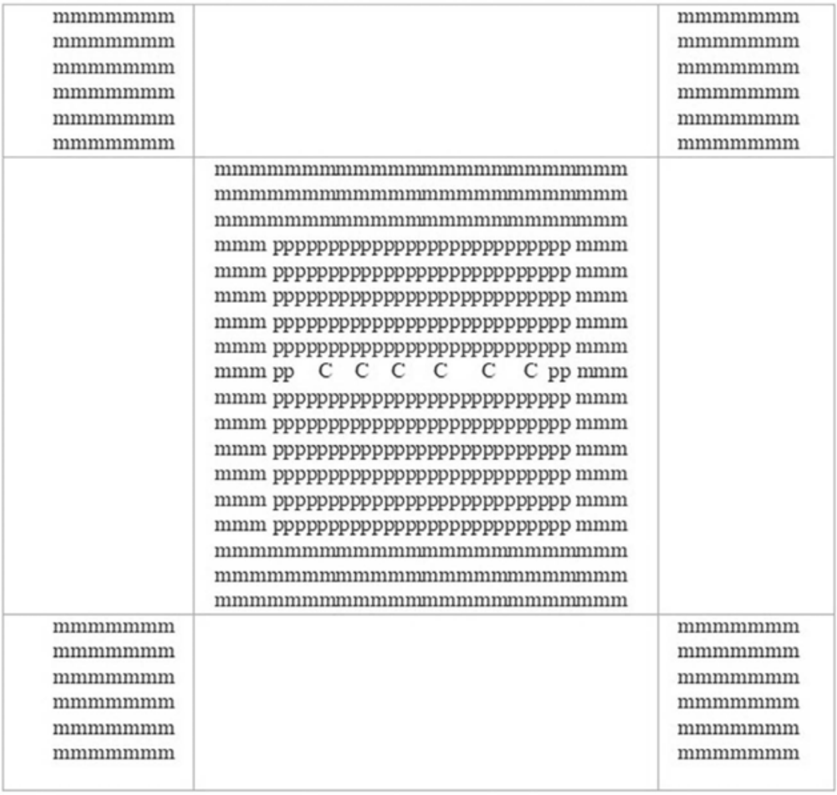



First Battle
Third Battle
Second Battle
Fourth Battle

Above: arrangements of several Spanish battalions. Other formations might be drawn up in a straight line or in two lines.

Below: a regiment drawn up in the Dutch style. By the mid 1630s the Bavarian Army had abandoned the Spanish formation in favour of the Dutch system. Key: Col = colonel; Lt Col = lieutenant colonel; Capt = captain; L = lieutenant; E = ensign; S = sergeant D = drummer; s = shot; p = pike


Lt Col
Col
Major
L L L 3 Capt 1 Capt E E E 2 Capt 3 Capt 5 Capt L L
E E E E
1 S 3S 5S D L L L 6S D 4S 2S
D



A variant of the Spanish battalion, with sleeves of musketeers at each corner. These sleeves could be between 64 and 81 musketeers strong.

Once the pikemen could no longer use their pikes, because the enemy had come past the points, then according to Smythe they often resorted to their swords, although in 1627 during the landing of the Duke of Buckingham's Army at the Isle de Rhè one account records that the pikemen "fell to it with swords and push of pike, until they were breathless on both sides. The French finding our pikes to be longer than theirs, threw away their pikes and went to it with stones and so did our men, but ours beat them out and made them fly."[17]

When it came to hand-to-hand fighting, Johann von Wallhausen, who wrote extensively on military matters, suggested that the musketeers not only use their muskets as clubs, but also their bandoliers, musket rests, helmets and fists. Certainly there are many references during the English Civil War to musketeers "falling on" with "clubbed muskets". An English volunteer in the King of Bohemia's army also recalls, "our General gave command to draw out part of every company to be of the forlorne hope to give onset … [we] threw away our snapsacks, with all our provisions, both linen and woollen because it would be troublesome to us."[18]

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[17] Smythe, pp.23–27; Mr Gareston, *A Continuing journal of all the Proceedings of the Duke of Buckingham on the Isle of Ree* (London, 1627), p.7.

[18] John Bingham, *The tactiks of Aelian, or, Art of embattailing an army after ye Grecian manner* (London, 1616), p.84; Johan von Wallhausen, *Kriegskunst zu Fuss* (Oppenheim, 1615); *A Relation of the passage of our English Companies from time to time* (London, 1621).

Curiously the publication *Theatrum Europaeum* shows Tilly's army in the Dutch formation at the battles of Höchst, and Wimpfen, but this may have just been artistic licence.[19]

However, Breitenfeld was the beginning of the end of these large infantry formations. During the early 1630s Montecuccoli recalls that: "In the Imperial army it is customary to make the battalions seven men deep placing the remainder in front. If the total is between 300 and 400 pikes Friedland [Wallenstein] made the number of ranks even, so that the ensigns would be stationed exactly in the middle of the unit, i.e. the fourth row."[20]

With the Swedish brigade also being abandoned in 1634 this left only the Dutch formation, which usually drew up in 10 (later eight) ranks deep and divided the musketeers equally between both flanks of the pike block. Each soldier had his own place of importance in the following order:

File	Order of Importance
1	1 (leader)
2	5
3	9
4	8
5	4 (middle man)
6	3 (middle man or half file leader)
7	7
8	10
9	6
10	2 (bringer up)

However, when the order was given to "double your ranks and files", the 10 ranks would become five with the half file leaders moving up to the file leader. As the English writer, John Bingham, points out, this manoeuvre "bringeth as many hands to fight as the proportion of the forces will allow".[21]

The seniority of the files was as follows:

Ranks	10	9	8	7	6	5	4	3	2	1
Order of Importance	2	6	10	7	3	4	8	9	5	1

Therefore a block of either musketeers or pikemen would consist of 100 men.

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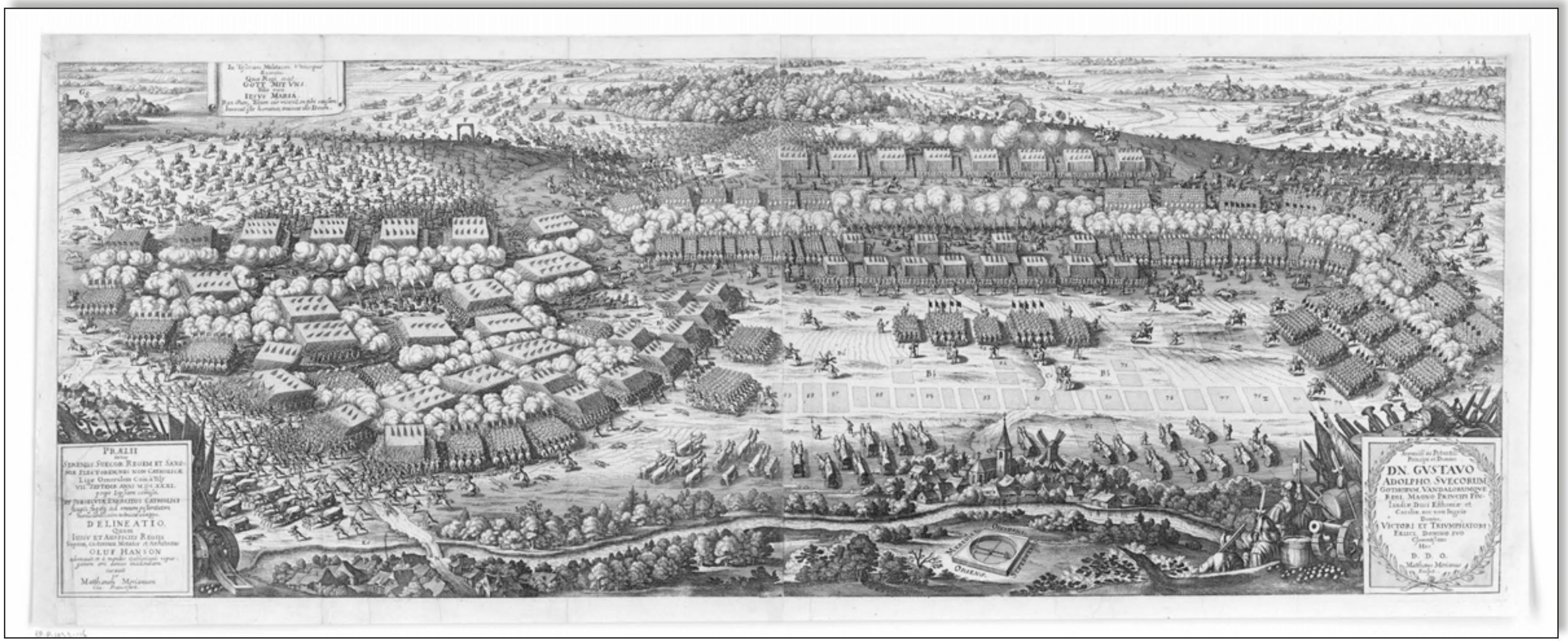
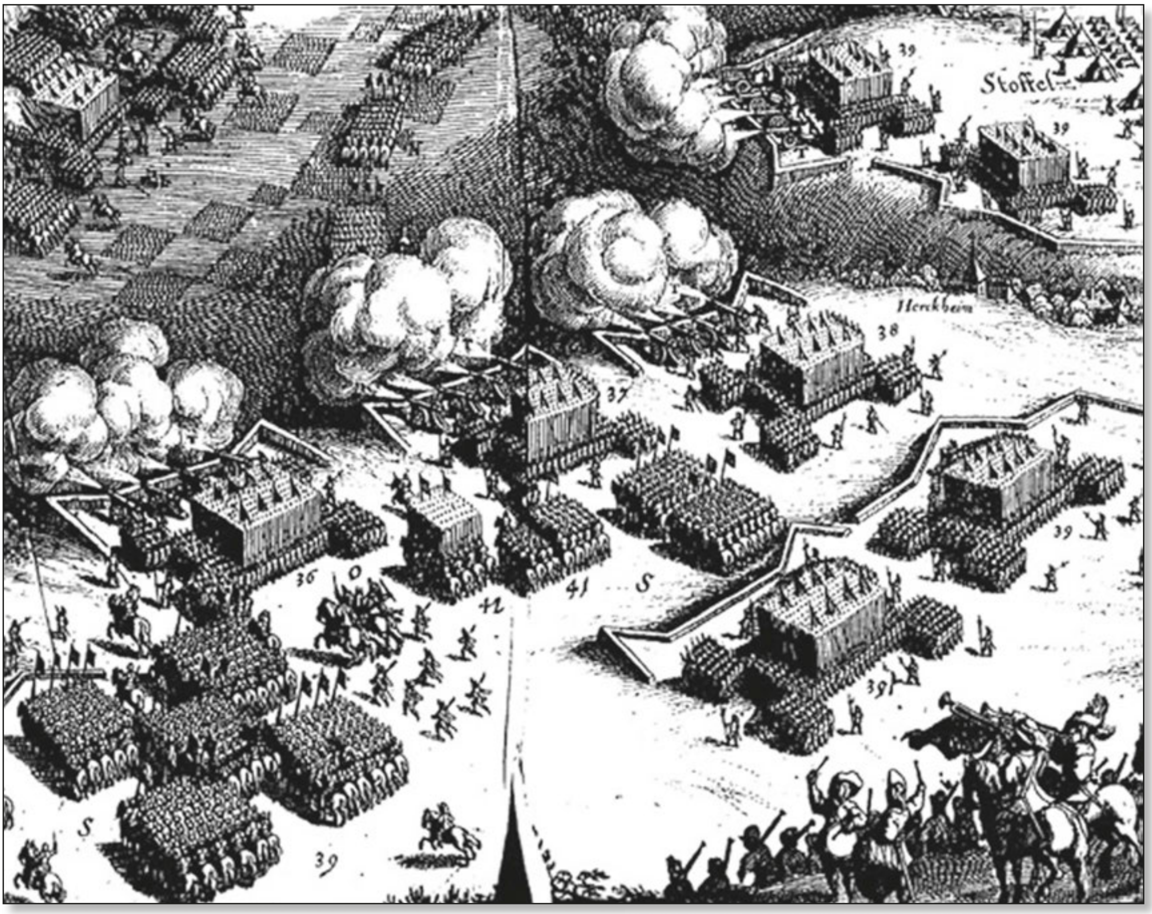
[19] Abelin, vol. 2., pp.635, 692.

[20] Barker, p.90.

[21] John Bingham, *The Art of Embattaling an Army, or the second part of Aelians tacticks* (London, 1631), p.16.


PRÆLII
DELINEATIO
OLUF HANSON
DN. GVSTAVO
ADOLPHO SVECORUM
VICTORI ET TRIVMPHATORI
D. D. O.

The battle of Breitenfeld in 1631. Matthäus Merian der Ältere. (Rijksmuseum)



Tercio deployed at Nördlingen behind earthworks, 1634.

Cavalry Formations

At the battle of White Mountain the cavalry was dispersed among the formation to support the infantry, but later in the war it was deployed on the wings of the army. Cavalry officers could turn to the works by Wallhausen, Giorgio Basta and Ludovico Melzo, who were some of the leading tacticians of the day. Melzo first published his work on cavalry in 1611 and by 1626 it had been republished 16 times, and as well as appearing in the original Italian it had also been translated into German and French.[22]

However, these authors disagreed on certain points, including how many ranks the cavalry were to draw up in, some advocating five for cuirassiers, while others recommended six, which could "be doubled to three deep on occasion", which pre-dates Gustavus Adolphus' reforms. According to

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[22] Wallhausen, *Art Militare a Cheval*, which had been translated into French from its original German in 1616; Giorgio Basta, *Il Governo della cavalleria Leggera* (Bernardo Giunta, Giovanni Battista & C Venezia, 1612); Ludovico Melzo, *Regole Militari del Cavalier Melzo sopra il governon e servitio della cavalleria* (1611)

Wallhausen, however, harquebusiers should be drawn up in eight ranks and the cuirassiers 10. These ranks and files had the same seniority as the infantry, with the file leader being the most important and the bringer up the second.

As with the infantry there were various ways the cavalry could fight in battle. According to John Cruso, who studied the works by Wallhausen, Melzo and Basta, the cavalry:

> must be exercised to give fire by ranks. The first rank, having given fire, is to wheel off to the left (unless the ground will not permit it, but that it must be to the right) making ready and falling into the rear, the second rank immediately gives fire upon the wheeling away of the first, and so the rest successively … But others do utterly reject it, as too much exposed to danger. In their firing by ranks, the first rank advanceth some 30 paces before the body, first on the gallop, then in career (as some direct) and so to give fire; the second doth the same and so the rest.[23]

This manoeuvre is usually referred to the caracole, but Wallhausen never refers to it this way. In the German version he gives the name "carrieren", but in the French translation this word has been translated to "carriere" in one instance and "caracole" in another, which means "half turn". In this instance Wallhausen refers to the caracole manoeuvre as when a body of cavalry splits in two, allowing the enemy cavalry to charge through the newly made gap and then fire upon it with their pistols. Certainly it would be useless to fire at heavily armed cuirassiers at anything less than point blank range, since their armour was, in theory, pistol proof. Certainly the word "caracole" is mentioned in some other accounts: Cruso mentions its as does Christian von Anhalt senior, who was serving in the Bohemian Army in 1620, and records at the battle of White Mountain that, "I saw before me my cavalry [regiment], which had been levied by Lieutenant Colonel Streiff, with some caracolling and others galloping away." In another incident during the battle he saw that Lieutenant Colonel Baron Hofkirchen's Regiment "performed a bad caracole". Although Anhalt did not describe what this entailed, it seems that "caracole" was a term used when cavalry fired upon either enemy cavalry or infantry.[24]

It has been said that Gustavus Adolphus introduced the cavalry charge into western Europe, when on the eve of the battle of Breitenfeld he ordered that "only the first or at most the first two ranks, when near enough to see the whites of the enemy's eyes were to give fire, then to reach for their swords; the last rank however was to keep both pistols (or in the front ranks, one) in reserve for the melee." Robert Monro records that during the battle the Swedish cavalry waited for the Imperialists to fire first, then after a volley of musketry "our horsemen discharged their pistols and then charged through them with swords".[25]

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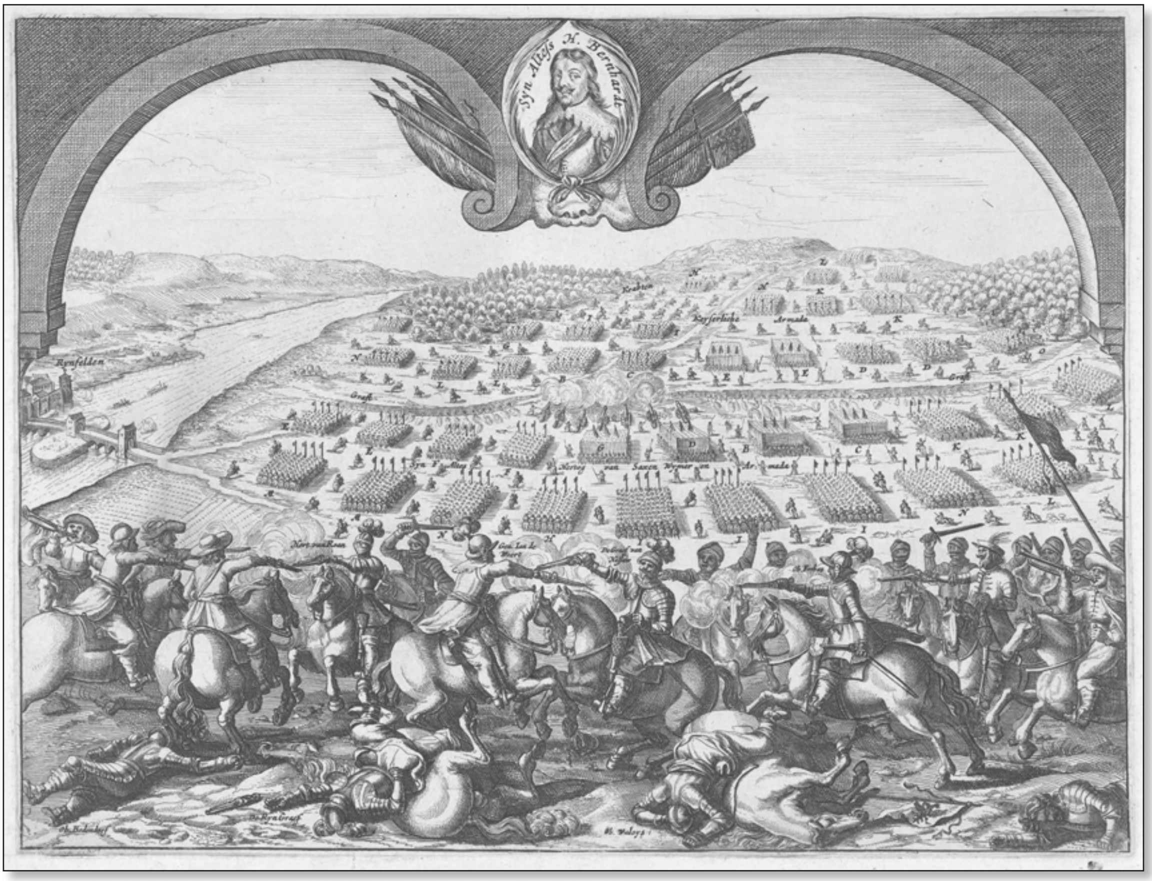
[23] Cruso, pp.97–98.

[24] Quoted in Wilson, *The Thirty Years War: A Sourcebook*, pp.65–66.

[25] Monro, part II p.65; Chemnitz, quoted in Richard Brzezinski and Richard Hook, *The Army of Gustavus Adolphus 2: Cavalry* (London: Osprey, 1993), p.23.



A cavalry action at the battle of Rheinfelden in 1638. Artist unknown. (Rijksmuseum)

Since the cavalry had to see "the whites of the enemy's eyes" before they fired their pistols, the cavalry must have made contact at a walk. Moreover, far from Gustavus Adolphus introducing the cavalry charge, Sir John Smythe writing in 1595 suggested that a squadron:

> should charge but 30 paces, that is 20 galloping … and 10 for their full career to give them the greatest blow and shock … [any further] they shall find themselves in so great a distance greatly disordered and confounded in their ranks and their horses out of breath and thereby the force of their blow and shock greatly weakened when the come to encounter with the squadron of the enemy.[26]

He also suggests that about 10 paces from the enemy the cavalrymen should give a "terrible shout" and that if they themselves are charged, then to advance to meet the enemy, which would then result in a general melee.[27]

Wallhausen clearly shows that the cuirassiers were not intended to simply fire their pistols in battle, since he also depicts them using their swords and pistols as a club, or even wrestling their opponent from his horse. He also

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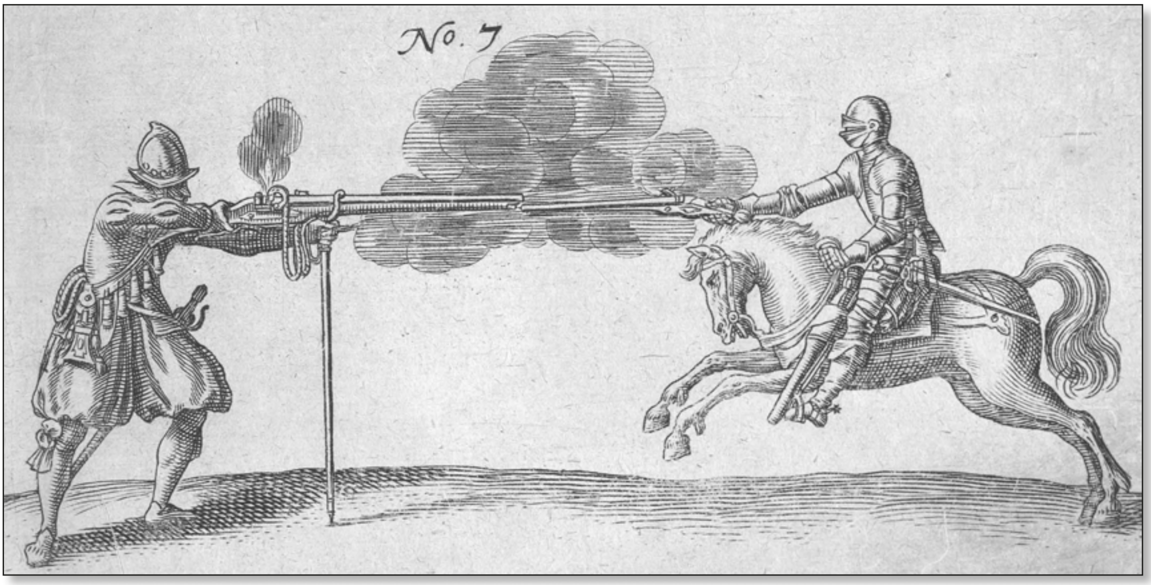
[26] Smythe, *Instructions, Observations and Orders Mylitarie* (1595).

[27] Smythe, *Instructions, Observations and Orders Mylitarie* (1595).



A cuirassier versus a musketeer. Johann Jacobi von Wallhausen, *Kriegskunst zu Pferd*, 1616. (Rijksmuseum)

recommended that the cuirassier should stab the enemy's horse to bring down the rider. Gervase Markham in 1625 also records that on the word *Passe a Cariere*, the trooper should:

> [thrust his] horse violently forward both with his legs and body and giving liberty to his bridle. As soon as the horse is started into his gallop he shall give him the even stroke of his spurs, one or twice together and make the horse run to the height of his full speed … which will not be above six score or eight score yards.[28]

According to Montecuccoli, cuirassiers "are the most suitable instruments of combat for creating stability, providing support and absorbing shock". At the battle of Lützen Piccolomini's Regiment of Cuirassiers, "At the first coming made a wonderful breach through the King's Finlanders, who are light horsemen, but lighting upon a Brigade of the King's infantry, thinking to break throw them also, the foot received them with such a volley of shot they were constrained to retire."[29]

In another incident during the battle an unnamed cuirassier officer mortally wounded Gustavus Adolphus, and as the Swedes tried to rescue him, "the cuirassiers charged so fiercely in upon the Swedish; that they were not able to bring off the dying king." True, Piccolomini's Regiment was forced to retreat, but these two accounts hardly suggest a slow plodding attack.[30]

Certainly Melzo, Basta and Wallhausen suggest that the cavalry should charge at the trot rather than the gallop in order to keep the formation tight, although even this had its problems, because if a horse was killed or stumbled then it would bring down the other horses behind it, killing or wounding their riders. As with the ranks of the infantry, the front and rear cavalry ranks were the most important because they would steady the rest of the squadron, otherwise:

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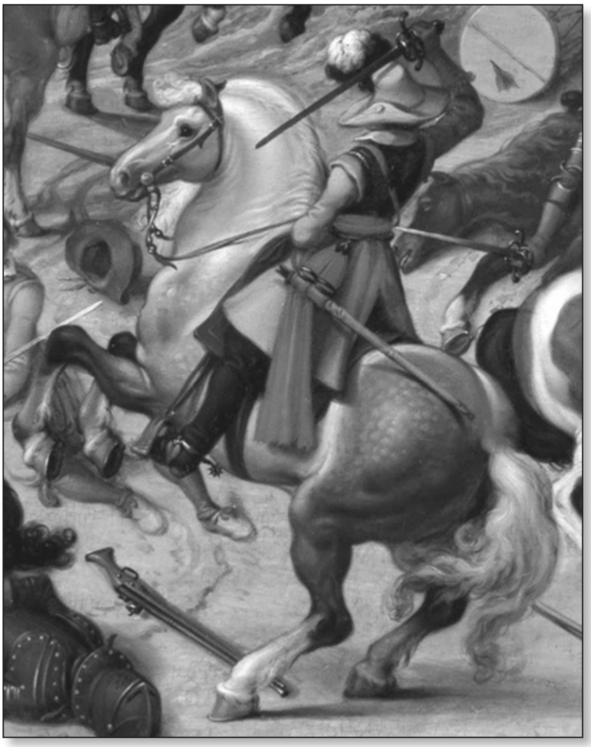
[28] Markham, *The Souldiers Accidence*, p.52.

[29] Sydnam Poyntz, *A True Relation of these German Warres From Mansfeld's Going out of England which was in the year (1624) untill this last yeare 1636 whereof my self was an eyewitness of most I have here related* (Tonbridge: Pallas Armata, 1992), p.73; Barker, p.108.

[30] *The Swedish Intelligencer, the third part* (London: Nathaniel Butter and Nicholas Bourne, 1633), p.173.

> Even though the brave soldiers (who are in the minority) proceed resolutely to the fray, the others (who have no desire to take the bit into their mouth) remain behind. And so, over a distance of 200 paces, one sees this long rank thin out and dissolve. Great breaches appear within it … On many occasions only twenty or twenty five of a hundred horse actually charge. Then, when they have realized that they have no support or backing, after having fired a few pistol shots and after having delivered a few thrusts of their swords, they withdraw, assuming that they have not been immediately overturned themselves.[31]



Example of later Thirty Years' War horseman, equipped with buff coat, breastplate and backplate. Sebastiaen Vrancx. (Michał Paradowski's archive)

Squadrons were made up of one or more troops of horse and varied from 200 to 300 troopers. When they deployed in battle order the squadrons were deployed in a chequerboard formation so that the second rank could cover the intervals between those riders in the front rank. According to Montecuccoli:

> The foe would be showing great temerity if he were to dash into the gaps, passing by and offering his flanks to the two units posted behind the first line … such a disposition is that since the troops cannot be attacked, they remain an unknown factor. The mere sight of them does not fail to make the foe suspicious and uneasy. They keep him intimidated because they can always advance when and if they want to.[32]

However, the disadvantage of this formation is that if a squadron in the front line had to retreat then it usually wheeled to its right or left, and then "it is a matter of sheer luck if it happens to meet quite precisely that vacant space to its right or left".[33]

As for harquebusiers, they could skirmish at a greater distance with their carbines than the cuirassiers with their pistols, but they lacked weight in a charge. Cruso suggests that they were to be:

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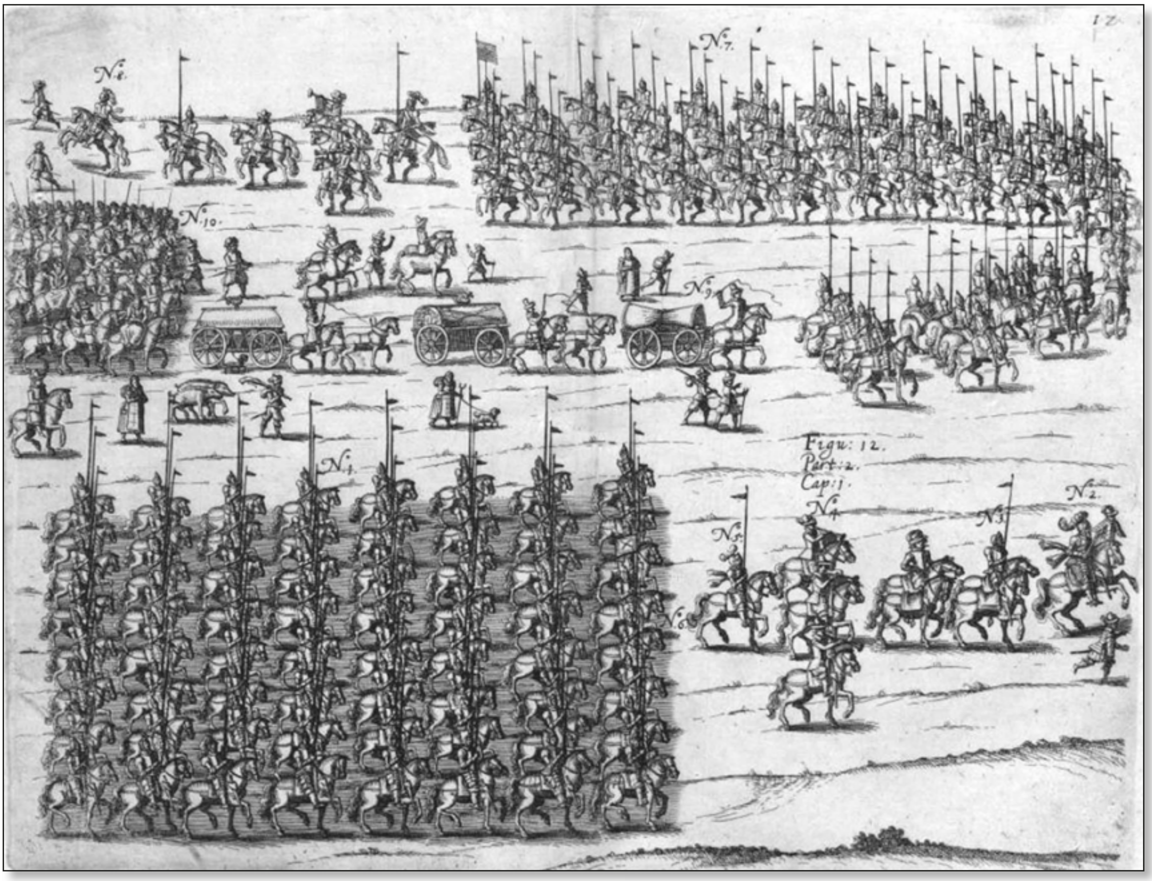
[31] Barker, p.92.

[32] Barker, pp.94–96.

[33] Barker, pp.94–96.



The cavalry of an army on the march. Johann Jacobi von Wallhausen, *Kriegskunst zu Pferd*, 1616. (Michał Paradowski's archive)

> Exercised to give fire by ranks. The first rank, having given fire, is to wheel off to the left (unless the ground will not permit I, but that it must be to the right) making ready and falling into the rear; the second rank immediately gives fire upon the wheeling away of the first, and so the rest successively. Wallhausen would have them also give fire by file, the outward file towards the enemy (whether right or left) advancing before the body in full career and so firing the rest successively do the same … But others do utterly reject it, as too much exposed to inevitable danger.[34]

According to Montecuccoli, Tilly was "accustomed to say that he would never have seriously considered using harquebusiers in a military engagement". They also performed badly at the battle of Lützen, which prompted Albrecht von Wallenstein to write to General Johann Aldringen that the harquebusiers:

> [Had] failed to injure the foe, even a little, but on the contrary these troops had either thrown the other [friendly] cavalry into disarray as a result of being thrust back upon it or else had hindered the latter when it began to charge. Thus he

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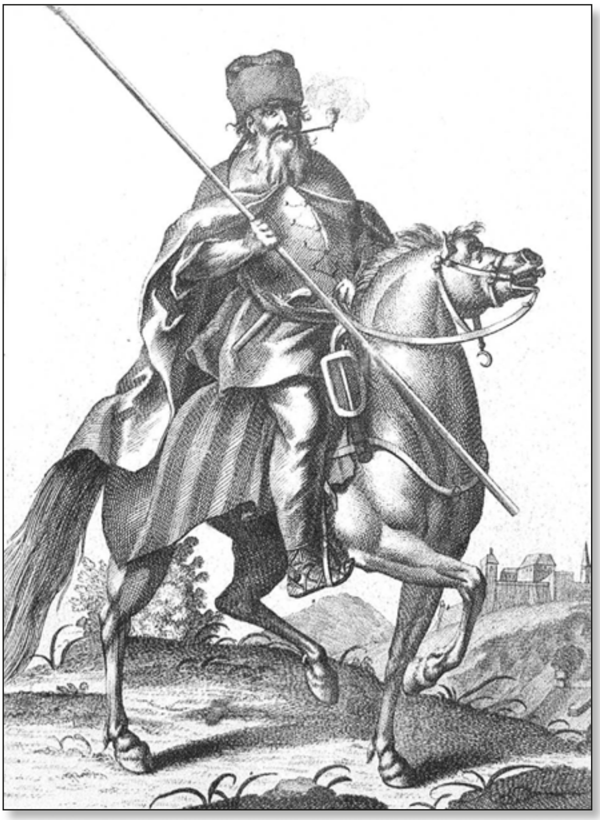
[34] Cruso, p.43.

> unconditionally commanded all the commanders of horse to abolish the carbines and to supply such regiments with cuirasses.[35]

It was during the pursuit of a regiment that most casualties were suffered. It is said that the King of Denmark lost only 600 men during the battle of Lutter itself, but 3,000 were killed in the pursuit afterwards.

Certainly, when a colonel could afford to he usually re-equipped his harquebusier regiment to become a cuirassier unit, since cuirassiers were seen as having a more important role of the battlefield and so had a higher status. However, despite the advantages in battle a cuirassier regiment was expensive to maintain and a "boy" was needed to put on the riders' armour; therefore by the end of the war many troopers had discarded their cuirassier armour in favour of harquebusier armour. In fact by the 1660s a cuirassier was described as being armed with just a backplate and breastplate with a helmet.



A possibly later interpretation of a Croat at the time of the Thirty Years' War. Soldiers such as these were recruited from the military border with the Turkish Empire..

Lancers and Dragoons

During the sixteenth century the lancers would have led the way and forced open any gaps which had appeared in the enemy's ranks, but by the beginning of the seventeenth century lancers were in decline and only appeared on the battlefield as a general's lifeguard. Certainly Matthias Merian in his *Theatrum Europaeum* shows the Cardinal-Infanta's Guard at the battle of Nördlingen armed with lances, and Wallenstein's lifeguard also appears to have included lancers.

When lancers were used, Montecuccoli recommended that they should be drawn up in two ranks of 25 men each:

> Since they are effective only because of the fury which characterises their entry into the battle; the enemy is put to flight by the mad dash of the horses. Once the lance has torn open a gap, it is seconded by the cuirassiers, arrayed in serried ranks. This weapon then proceeds to bowl over and rout all that it encounters.[36]

Wallhausen suggested a similar tactic, that the lancers would make a gap in the enemy's ranks which was exploited by the cuirassiers.[37]

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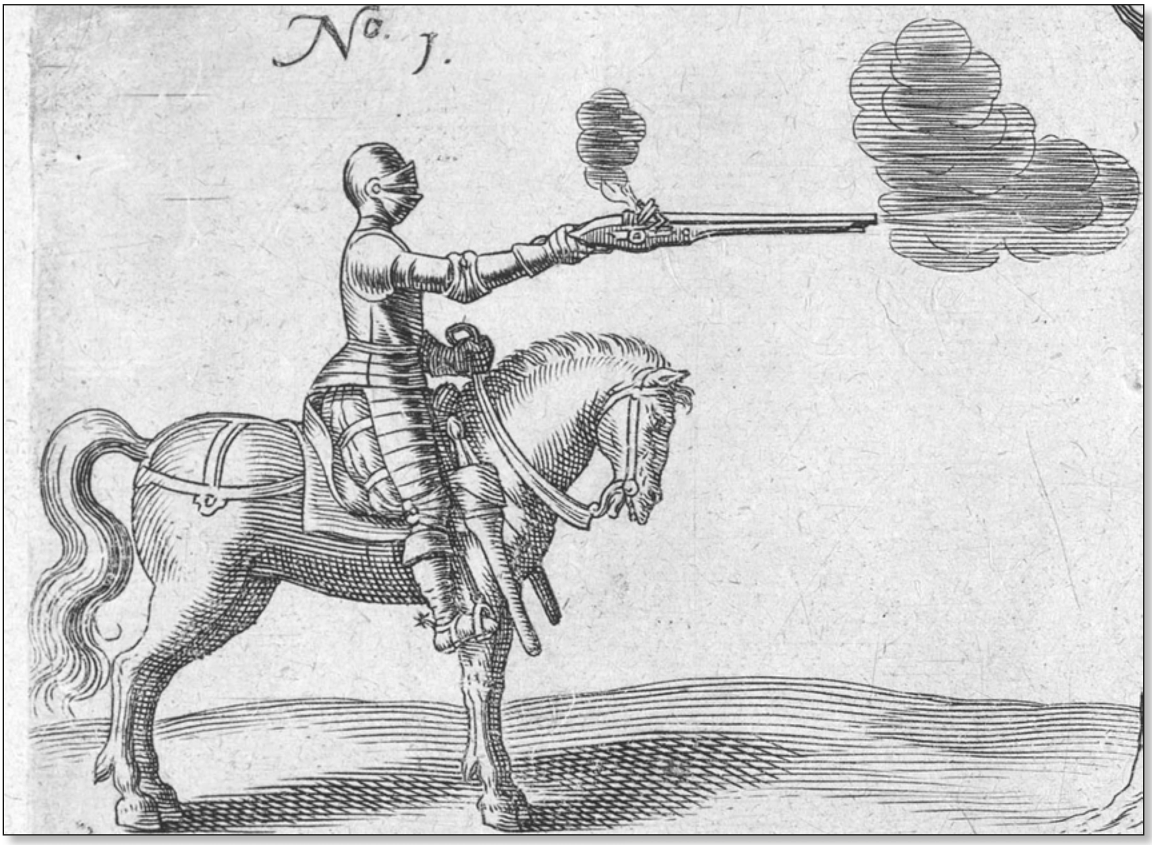
[35] Barker, pp.108, 110.

[36] Barker, p.106.

[37] Barker, p.106.



A depiction of a dragoon and his equipment, from a military manual of the time. Dragoon pikemen were used in the early stages of the war.

As lancers were declining in popularity, dragoons were being introduced. Dragoons were mounted infantry and would ride to the battlefield on horses inferior to those of the cavalry, and then dismount and fight on foot. According to Wallhausen a company of dragoons should muster 200 men: 100 pikemen, who were to form up 10 ranks deep, and 100 musketeers who were divided into two bodies of 50 and also draw up in 10 ranks by five files and placed on each flank of the pikes.[38] As well as their role on the battlefield dragoons were ideal for ambushes, patrols and escorting convoys. Detachments from the foot regiments could also be mounted temporarily as dragoons. Sydnam Poyntz, who was then with Count Ernst von Mansfeld at Troppo, recalls "our pikemen were made dragooners". Why Mansfeld should just choose a detachment of pikemen as dragoons Poyntz does not say, although he does say that his musketeers were loaded into wagons some days later.[39]

On 5 June 1644 a Captain Nathaniel Burt published a tract on dragoon tactics, which stated that dragoons should seize bridges or passages and line hedges, and being placed in front or on the flanks of the army they could prevent ambushes. He also recommended that when an enemy was retreating:

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[38] Wallhausen, *Art Militaire a Cheval*, p.55.

[39] Poyntz, vol. 1, p.48.

> dragoons do better service firing on horseback then the cuirassier … [firing] by introduction on horseback; which is a passing through or between the files, the files being in open order; the first rank having given fire, by the commander's direction, let the bringer up pass through the files, which is commonly to the left, placing themselves before their leaders in the front and then giving fire, the rest of the ranks acting the same successively.[40]

Croats, being light cavalry, had little shock value when it came to a clash on the battlefield, but they were usually posted on the far end of the cavalry wing so that they could outflank their opponents, while the enemy's troops were engaged with friendly cavalry. This tactic met with great success, and at the battle of Breitenfeld Colonel Palant's and Colonel Saradetzky's regiments captured several colours belonging to the Saxon regiments of Ernest von Starschedel and Hans Casper von Klitzing, with little loss to themselves.

Artillery

Du Praissac recommended in his *Arte of Warre* that in battle:

> The artillery ought to be so placed that it hinder not the passage of the battalions, and that it may easily discover those of the enemy. For the most part the infantry is within the body of the army, in several Battalions, disposed chequer wise: the cavalry on their wings and rear in several squadrons, and the artillery according to the convenience of the place, so the Front of the Army or on the flanks of the Battalions.[41]

Du Praissac continues, "The artillery must play so soon as they begin to discover the battalions of the enemy; making the battery fully and speedily to disorder and scatter them before they come to give battle."[42] This advice is also given by Cruso word for word, but Du Praissac continues:

> As soon as you be within reach of the cannon you must go on directly upon the enemy, (unless you be sheltered from his artillery) by this means your soldiers are encouraged, you avoid the danger of the enemy's cannon … [however] you must not give on so hardily as that … [your] battalions be disordered … [therefore] you are to use a marching pace

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[40] Captain Nathaniel Burt, *Militarie Instructions, or the Souldier tried, for the use of the Dragoons, being a part of cavalrie for fierings, on horseback, as the Harquebusier and on foot, as Infantry, very necessary for such as desier to be studious, in the waye of the Art militarie, never before published, and now set forth by Captain Nathaniel Burt* (London: The Hermit at Wapping, 5 June 1644).

[41] Du Preissac, *Arte of Warre*, p.27.

[42] Du Preissac, *Arte of Warre*, p.27.

> until you come within distance of a pistol shot, but then double your pace and to charge furiously.[43]

The larger guns, such as the culverin, had a maximum range of 2,100 paces, so that they could probably hit the enemy forces even before they advanced and would probably be able to fire several shots before the enemy came within point blank range of 400 paces. By now the smaller artillery pieces would have begun firing; the sakeret or minion had a range of between 280 to 1,400 paces and a falconet 260 to 1,200 paces, so the battalions would be under constant fire. There are accounts of whole ranks being swept away, and Robert Monro, who was serving in Colonel Donald Mackay's Regiment in the Danish Army, recalls that a lieutenant and 13 soldiers had their heads shot off by one cannonball. In another incident Monro, whose regiment by now had transferred to the Swedish service, recalls that at the crossing of the Lech, Gustavus Adolphus formed his artillery up in a large battery of 72 pieces of cannon. These "played continually into the middest of Tilly's army [all day], who were drawn up in battle", on the opposite bank; "where many were made to lie dead by our cannon, for those that were not hurt by the bullets, they were lamed by branches and trees, cut by the cannon".[44]

Whatever their tactics, many men probably performed the following ritual that Father Fitzsimon observed just before the battle of White Mountain on 8 November 1620:

> The chaplains were hearing confessions most zealously, and especially the Fathers of the Society [Jesuits], who shirked no labour or dangers in this campaign. Eight of these Fathers were carried off suddenly in the Bavarian Army alone. Many of the bravest soldiers were saying their beads, and kissing their crucifixes. Then they eat something and called out to be led to battle.[45]

The artillery pieces might also be blessed before they opened fire on the enemy. After this, Father Fitzsimons was ordered to recite the *Salve Regina* and was answered by Maximilian and General Bucquoi who commanded the Imperialist troops at that time. The commanders may have given their men a rousing speech before the trumpets sounded the advance, but for many men their prayers to keep them safe would go unanswered.

The early seventeenth-century soldier was more likely to take part in skirmishes, or form part of a garrison or besiege a town than take part in a large battle. The newspaper *More News from the Palatinate* for 5 June 1622 gives some advice concerning ambushes when fighting in wooded countryside, when the defendant has the advantage over the assailant:

> That they need not fear either ambush or surprise, but the assailant is rather weary to enter those thicket for fear of falling himself into an ambuscado … [by] an enemy in the wood, the enemy can have small use of his horse and the trees and

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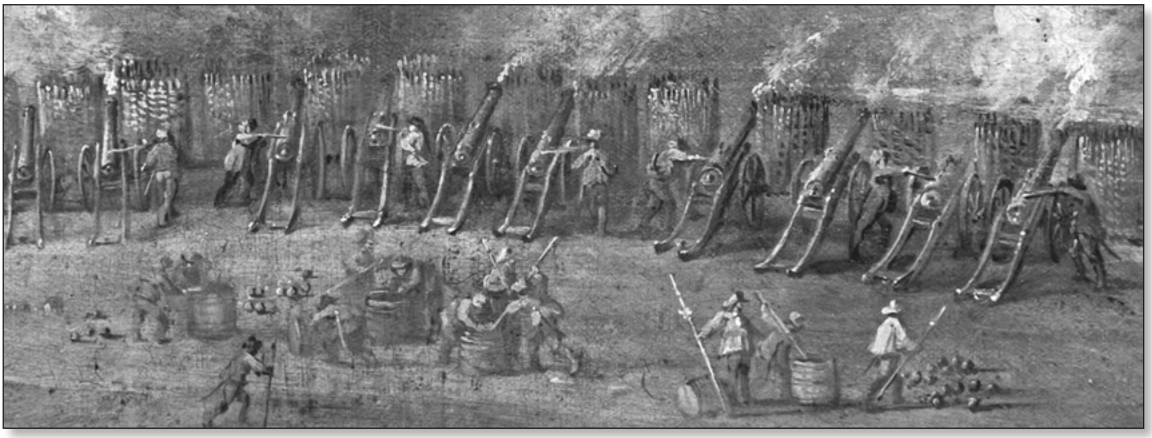
[43] Cruso, p28.

[44] Monro, part I, pp.65–66; part II pp.116–117.

[45] Fitzsimon, p.97.



Battery of cannon on prepared position. Pieter Snayers. (Michał Paradowski's archive)

> bushes make his pikes mostly unserviceable too. As for the shot, they may go abirding if they please for any great good they can do for they shall be sure to hit more trees then men; whereas the defendants may better use their arms; for their body of pikes may be orderly ranged and may make a firm stand and are not encumbered with carrying and entangling them among the trees, but need no more but charge them upon the assailants and every tree again is as good as a tower for a musketeer from behind which he may at pleasure and in safety almost discharge and the tree serves him for a rest too: so then an army there fears nothing but firing the coppis about their ears.[46]

Newspapers often printed how many towns a general had captured, therefore for a general, knowing how to defend or attack a town was just as important as knowing the latest formations in the field and so they called upon engineers to advise them. The engineers of the day had long since developed the art of fortification, with earthworks protecting a town's stone walls, which were no match for the artillery. These fortifications also made maximum use of firepower, where an attacking force could be caught in the garrison's crossfire. The drawback of these fortifications was that they were expensive and needed not only an experienced engineer but manpower to construct them, although this task usually fell upon the inhabitants of the town itself and its surrounding area. They also took a long time to complete, especially if they completely encircled a large town or city and were lined with bricks.

Therefore an engineer would have to decide which earthworks were best suited to the town or city. These could be a half moon earthwork or hornwork (which had a half bastion), which were usually placed in front of the bastion. Then there were star forts, shaped like a star, hence their name, and redoubts which were square works; these offered all-round protection to the soldiers inside the works. These earthworks could be joined by a ravelin which was a curtain wall of earth, or a trench which would complete the defenders' "line of circumvallation". These could be further protected by a ditch or moat and palisadoes, which were described by Sir Balthazar Gerbier as being "high

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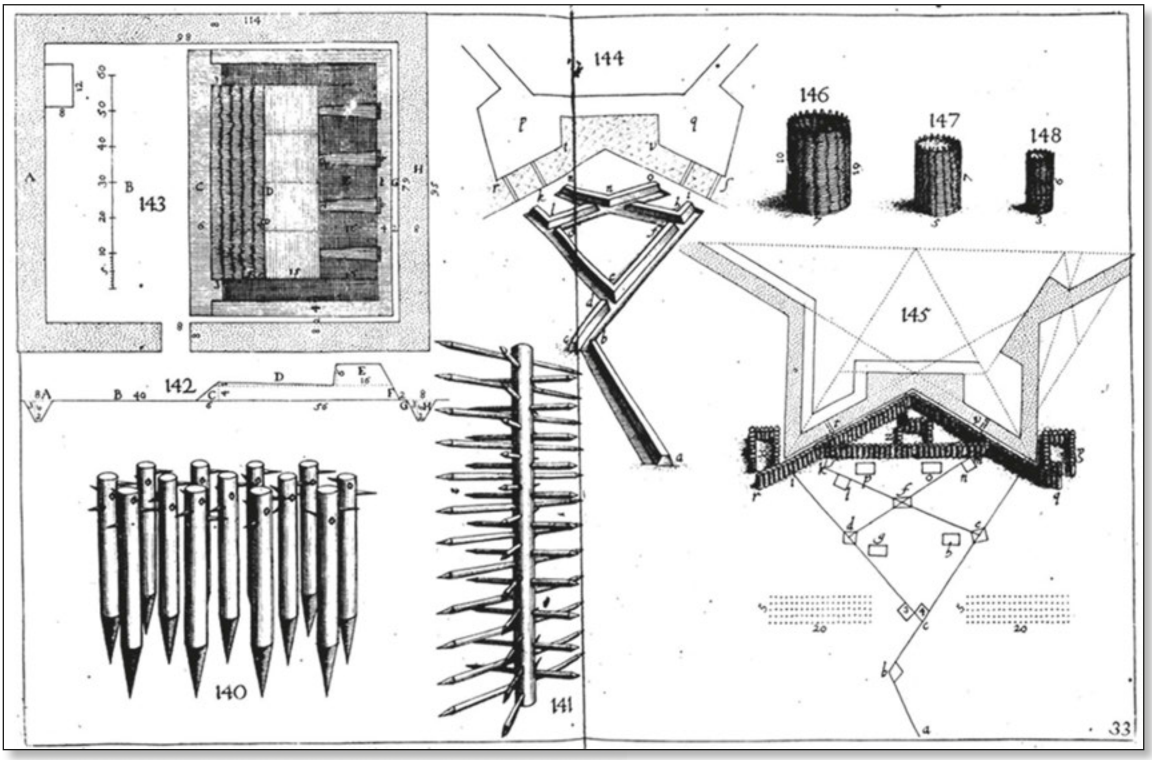
[46] *More News from the Palatinate*, 5 June 1622.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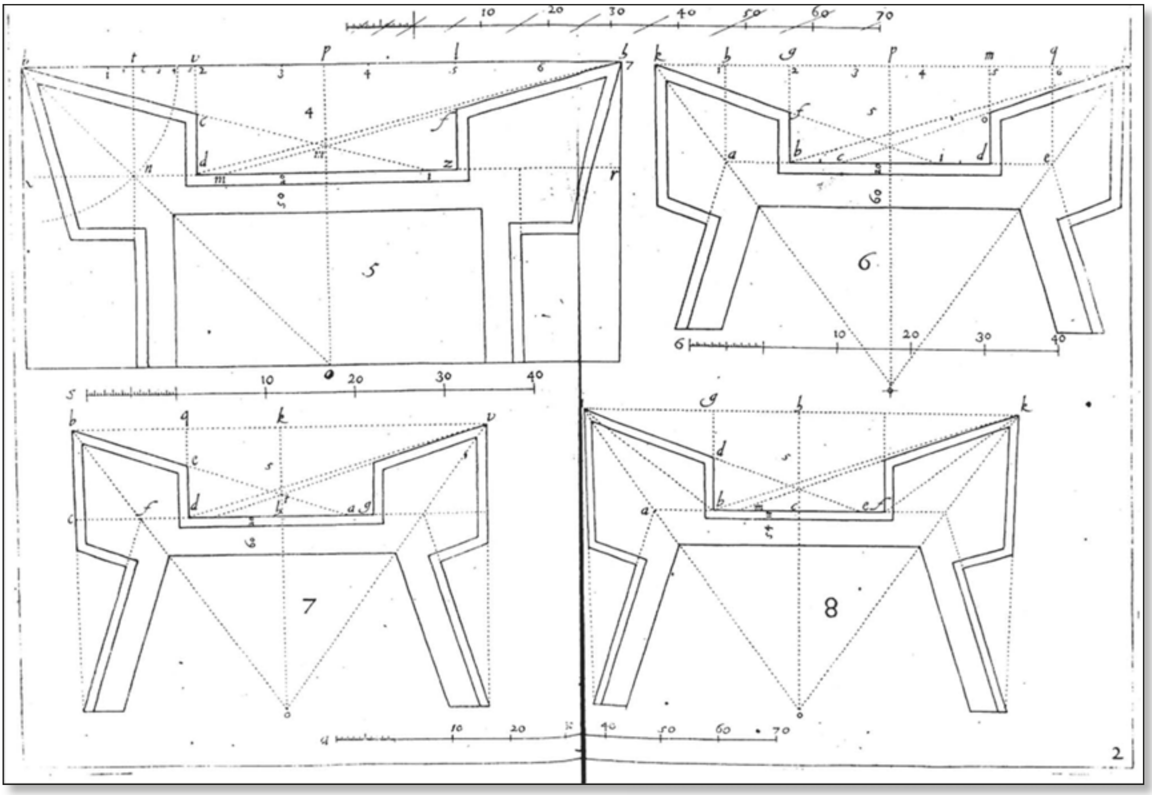
Diagrams from Samuel Marolois' *Art of Fortification*, 1638.



stakes of timber, set together like pales, shod on the top with iron forked heads", which were placed on the top, middle and/or the base of the work.[47]

With strong defences like these the commander of the besieging force had two options. He could choose to carry the place by storm, which could be very costly to the besiegers, but once the storming party had entered the town then the garrison and many of the inhabitants would be put to the sword, particularly if it was believed that they had held out longer than was necessary. On the other hand the besiegers were usually rewarded by being allowed to plunder the town of its riches.

Alternatively the commander could choose to starve the garrison into submission, in which case the outcome would depend on whether the garrison's, or the besiegers', food supply lasted the longest. The besiegers would quickly consume the supplies of the surrounding countryside if the garrison had not already collected them beforehand. A relieving force might also be able to break through the besieger's lines and resupply the garrison, but it would be impossible to resupply a large town or city in one or two nights.

Among the leading engineers of the day was Samuel Marolois, who recommended that the place to be besieged was to be reconnoitred for any weaknesses before the besiegers began to set up their batteries. According to Marolois these were to be placed:

> In such a manner that they may beat upon the parapet of the ramparts and bulwarks of the town, to dismount the enemy's ordnance, and for this reason you must raise your batteries high according to the height of the ramparts, so that your cannon may play freely about two foot lower then the top of the parapet, according to which and in consideration of the distance, you must raise your said batteries, taking heed that your cannon be planted upon a plain superficies and elevated some 13 degrees, when the distance is far off. You must not raise them so as when the batteries are near unto the place.

Marolois continues:

> You [must] make your batteries and platforms according to the greatness and number of your pieces. For a demi-cannon being shorter then a whole [cannon] of necessity the platform of the one must be longer and deeper then the other, and seeing a cannon being mounted upon its carriage is some 16 or 18 foot long it is evident that the batteries ought to made for recoiling at the least 10 or 12 feet longer making 28 or 30 foot. Twelve or 15 of the first foot towards the parapet must be under laid with thick and strong oaken planks and the other with hurdles, when you have not planks enough. Upon the said batteries you [must] make a parapet 12, 16 or 20 foot thick or thereabouts with port-holes for your cannon …
>
> Sometimes you set up gabions six foot high and three foot broad filled with earth, for your ordnance to play out of leaving a little space between them to put out the mouth of your cannon, which space so soon as the cannon is discharged

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[47] Sir Balthazar Gerbier's *The First Lecture being an introduction to the Military Architecture or fortifications, read publically at Sir Balthazar Gerbiers Academy* (London: Robert Ibbitson, 1650), pp.5–11.

> is presently stopped and blinded with a bundle of brush full of leaves that the enemy may not discover the portholes. But when you make your batteries upon the counterscharfe or upon the brink of a moat then the portholes as soon as your cannon is shot off, are shut with doors of thick oaken planks musket proof, that the said portholes may not be seen.[48]

A battery was usually formed by four cannons at least 12 feet apart, so that the entire battery covered about 58 feet and was under the command of a battery or quarter gunner. A short distance away from the battery a cellar was to be dug where the gunners could store their gunpowder, match and shot until they were required. The gunpowder was to be covered with animal skin to protect it from any loose sparks which might ignite it. These guns would have to not only break down the wall where the besiegers were to storm, but also destroy any enemy guns which overlooked the position so that the storming party would not be caught in a crossfire.

Once the batteries had been established then the besiegers might also erect similar fortifications to those protecting the town, with the earthworks being connected by trenches and ravelins, which could either be placed in strategic places around the town or encompass it altogether. At first these were out of musket range so that the besiegers could work comparatively freely, but once they were completed the “approaches” would be started, which ran towards the weakest place or places within the fortification or town. The aim was to make the trenches and approaches at least two metres wide and two metres deep, although they could be up to 10 metres wide so that “a wagon loaded with faggots, brush or gabions may go in them”. Fire steps were also cut for the musketeers to fire at the garrison or for the engineers to see that they were still digging in the right direction, since the banks of the approaches were higher than a person’s height. Although pioneers were known during the early part of the seventeenth century the trenches were usually dug by the infantry, who had to work quickly because it would not be until they had dug down at least one yard and piled the earth on the sides of the trench that they were shielded from enemy musketry. For their part a garrison would do all they could to disrupt this work by sallying forth from the town or place. Since digging these trenches was considered to be extremely dangerous it was often suggested that these men should be paid extra.

Once the approaches were near enough to the enemy’s fortification a sap would be dug a metre wide and one to two metres deep so that an attack could be launched with scaling ladders. Needless to say, the enemy would pour on all the shot they could at this point to kill as many attackers as possible. It would not be until the end of the seventeenth century that Marshal Vauban recommended that a trench should be dug parallel with the fortification so that the attacking force could go ‘over the top’ in First World War style.

If the ground was right then the besiegers could also dig a mine towards the place being besieged. Once they reached the walls then barrels of gunpowder would be placed at the end of the gallery and the entrance was blocked up to make the explosion more powerful. However if those in the town or fortification suspected that the besiegers were digging a mine then they would commence their own countermine and try and blow up the besiegers in their mine before they had the chance to undermine the town's defences.

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[48] Marolois, p.37.

If a town was forced to surrender then the garrison might be able to march out with the "full honours of war", that is with colours flying, drums beating, the musketeers with lighted match and the promise that the force would not be attacked for a certain amount of time. However, when a Scottish major by the name of Wilson surrendered Loven Castle to Tilly's forces he forgot to include in the terms of surrender the colours of the two companies which formed its garrison, so he was forced to give up the colours which resulted in him being forced to leave the army in disgrace.[49] On the other hand, if it was considered that the garrison had held out when there was no hope of relief and had refused to surrender, then the garrison could expect no terms but to march out of the town holding white sticks, the traditional sign for the undertaking of safe passage, and had to swear not to fight again for a certain period of time.

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[49] Monro, part I, p.12.

11

Soldier–Civilian Relations

The Thirty Years' War has traditionally been seen as an all-destructive war, where soldiers destroyed vast swathes of Germany and the population declined dramatically during the period. The war is also said to have stifled Germany's economic expansion for centuries to come. However, recently some historians have argued that these atrocities were greatly exaggerated by those wanting relief from rents and taxation. This may be true in some cases, but there are far too many letters and diaries which mention that the soldiers of all armies committed crimes against the civilian population, and references to whole areas being laid waste, such as Hesse-Kassel and Bavaria itself. Moreover it was the misfortune for the Germanic states to be the battleground of Europe for centuries, but the Germans were still able to grow crops and still continued to work and live their lives, and support armies far larger than those that existed during the Thirty Years' War.

No matter what side the civilians were on, they inevitably suffered from the war. This could be by quartering soldiers and paying taxes. During the war the Bavarians alone paid 40,677,019 florins, which was 74 percent of the 58,828,799 florins raised by taxation or voluntary means towards Maximilian's war treasury. For taxation purposes property was divided into whole farms, half farms, quarter farms and an eighth of a farm.

Armies could also demand contributions from hostile lands. Although Maximilian appears to have only collected 1,684,630 florins this way, but both Wallenstein and Gustavus Adolphus are known to have heavily relied on the "contribution system", inasmuch that they could finance a larger army than they would otherwise have been able to afford. However, whilst this way of financing an army worked fine when the ruler was successful and controlled large areas of Germany, if they began to lose land they would also lose its income and so would not be able to afford to pay for their war effort. Furthermore, although these contributions were usually a monetary payment, payment could also be made in kind, such as food and clothing to save time purchasing these items. On 10 November 1631 it was reported from Swynfordt that:

> 'Tis a great misery that befalls these countries and none without pity or compassion can either behold or hear of the ruins in these parts. Men have heavy taxations

> laid upon them, and great contributions must be paid, but especially by the clergy, which causeth both laity and clergy to abandon their residence, which is pillaged and spoiled by the soldiers in their absence.[1]

If a town or village were lucky they would only have to pay their tax to one side, but for lands which both sides fought over, then they would have to pay both.

Probably the most famous accounts of the atrocities committed against the civilians is Philip Vincent's *Lamentations of Germany*, which records among the violence against civilians:

> Some of Tilly's soldiers caused his [the Duke of Saxony's] subjects to be tortured by half strangling them and pressing their thumbs with wheels …
>
> They made the people by force to eat their own excrement and if they would not, they thrust them down their throats and so choked some of them ...
>
> They have hung up some in smoke drying them with their fires, refreshing them sometimes with small drink or cold water. For these being such as were before overwhelmed with grief, they took care, left in their torment they should die too soon.
>
> Some they have put into hot ovens and so smothered or burnt them. Some they roasted with straw fires …
>
> To many they have bound so hard both hands and feet that the blood hath spouted out of the ends of their fingers and toes.

Then there are the medically impossible tortures which Vincent records, such as, "Many have they trussed up on high hanging on their feet stones and weights to stretch out their bodies" or "with chisels or like instruments they have gone about to plain the faces of some, pretending that they would make it equal or smooth". Vincent also mentions that the soldiers thrust a knotted piece of cloth or string down a person's throat and once he had swallowed it the soldiers pulled the string so the poor individual was pulled inside out.

However, it would be unfair to blame just Philip Vincent for an exaggerated view of the atrocities of the war, and many of these supposed acts were repeated again and again without question. However during the middle of the nineteenth century some historians did begin to question such purported events, for example the widespread cannibalism committed by Melchior der Schultz's band who it was said had eaten 500 human beings. The historian O. Mainardus looked into the archives and found that although Schultz's band had killed 251 people in 11 years, the only reference to cannibalism was that he had allegedly eaten the heart of an unborn baby whose mother he had killed. It is thanks to Mainardus and other historians that the "fact" of widespread cannibalism during the war has been discredited. Even so, in 1962 a survey carried out in the State of Hesse in Germany found that the people believed the greatest catastrophe Germany had suffered throughout

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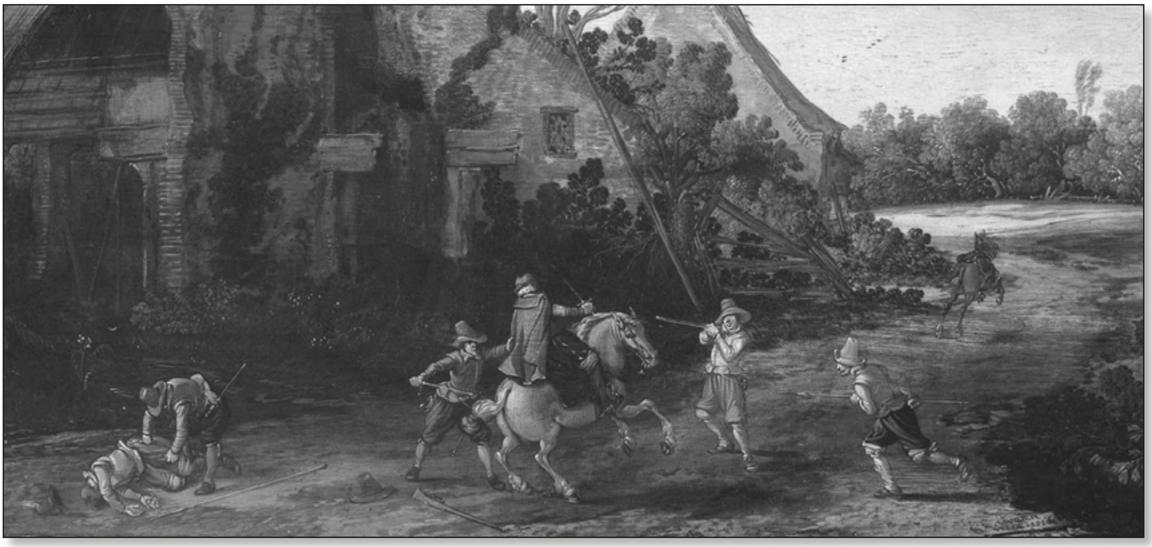
[1] LR 263/C/6, *The continuation of our forraine news* … 29 November 1631.



The robbery. Esaias van de Velde, 1616. (Rijksmuseum)

its history was the Thirty Years' War, with the Second World War, which had ended just 17 years before, in second place.[2]

On the other hand it would be wrong to dismiss all atrocities as mere propaganda or hearsay. Certainly one of the most common abuses mentioned by Vincent as being committed by the soldiers, was known as the "Swedish drink" whereby, "the mouths of some have they opened with gags and then poured down their throats water [from a] stinking puddle, filthy liquids and piss itself, saying this is a Swedish draught, so growing sick and their bellies swelling like a tun, they have died by leisure with the greater torment".[3] Despite its name it is said to have been used by all armies during the war.

Although at least some of Vincent's examples are almost certainly untrue, other examples appear to be based on some evidence, such as the case of soldiers "drying" civilians in smoke: the inhabitants of the town of Sechene, appealed to the Mayor of Brabant in 1625 complaining that soldiers had roasted some men to find out where their money was. True, these inhabitants were petitioning the mayor for extra time to pay their taxes, but Jacques Callot also shows soldiers hanging a civilian over a fire in his *Les Grandes Misères de la guerre*, published in 1633.[4]

On 22 September 1620 Francis Netherole wrote from Prague that the King of Bohemia's Army "cannot take Bautzen [but] hath pillaged and burned 40 villages thereabouts and they tell of strange and more than barbarous cruelties exercised by his soldiers which whether true or false being here believed to be practised on men". Bautzen finally fell to Frederick, but as Netherole again wrote, "it is said there are not above 130 houses remaining, the rest about a thousand being burnt". Unfortunately, there is no way of verifying these rumours, but whether true or not they must have spread fear among the population of a town or village that the same fate might await them if the soldiers came near them.[5]

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[2] Philip Vincent, *The Lamentations of Germany, Wherein, as in a Glasse, we may behold her miserable condition …* (London: J. Rothwell, 1638), pp.16–17; Steffan Davies, *The Wallenstein Figure in German Literature and Historiography, 1790–1920* (London: Maney Publishing, 2010), p.6.

[3] Vincent, pp.6–8, 11.

[4] TNA, SP 77/18, f.268.

On 10 April 1636 Peter Hagendorf recorded in his diary, "we besieged the city of Liège … This bishopric had three hundred churches and cloisters, eighteen cities and eighteen hundred towns. All of these we, for the most part, plundered and robbed." Hagendorf did not write this passage for propaganda purposes, so there is no reason to doubt it actually happened.[6] In another incident, this time in 1634, Hagendorf makes a passing reference to marching through the village of Günzburg near Ulm; as Tryntje Helfferich points out this should be compared to Hans Heberle's account, who lived in the village of Neenstetten near Ulm at the time. Hagendorf says, "they fell upon us in the land and plundered all of us, taking horses and livestock, bread, flour, salt, lard cloth, canvas, clothes and all our poor belongings. They beat the people badly and shot, stabbed and beat several of them to death."[7]

These soldiers belonged to Duke Bernard of Saxe-Weimar's Army, "which had been seriously ruined in Bavaria and the cavalry had almost no horses left". The plundering was worse in the minds of Heberle and others since Duke Bernard's army was seen as an ally.[8] Heberle and his fellow villagers would usually hide in a wood until the soldiers had gone, but on this occasion some of the civilians fought back which antagonised the soldiers even more.

Sometimes parish registers mention those who had been killed, for example in 1626 the register for Grandenborn in Hesse records four parishioners "killed by Tilly's troops".[9]

Another event that does seem to be true is that of some soldiers of Johan Sprinzenstein's Regiment of Foot breaking into a house at Neumarkt at midnight on 4 December 1622. The head of the household was away in Nuremberg at the time, but the soldiers threw his wife on to the floor and she was badly beaten and a cushion stuffed into her mouth. The soldiers managed to steal 6,000 fl from the house. A Sergeant Syring was later court-martialled for this incident and hanged for this and other crimes, although a Lieutenant Gunther, who was also court-martialled, was released due to lack of evidence. However, there is no suggestion the woman was raped, so it may be that the soldiers were more interested in pillaging the property than any sexual pleasure. On the other hand she may have been concealing the abuse committed against her because she would lose respect from the other townsfolk, even though she was forced into it. Even so there are a surprisingly few first hand accounts of rape, so either rape was not as common as people believe, or crimes against women of the lower orders were just ignored.[10]

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[5] TNA, SP 81/18 Francis Netherole 22 September 1620, f.112, SP 81/19, f.37.

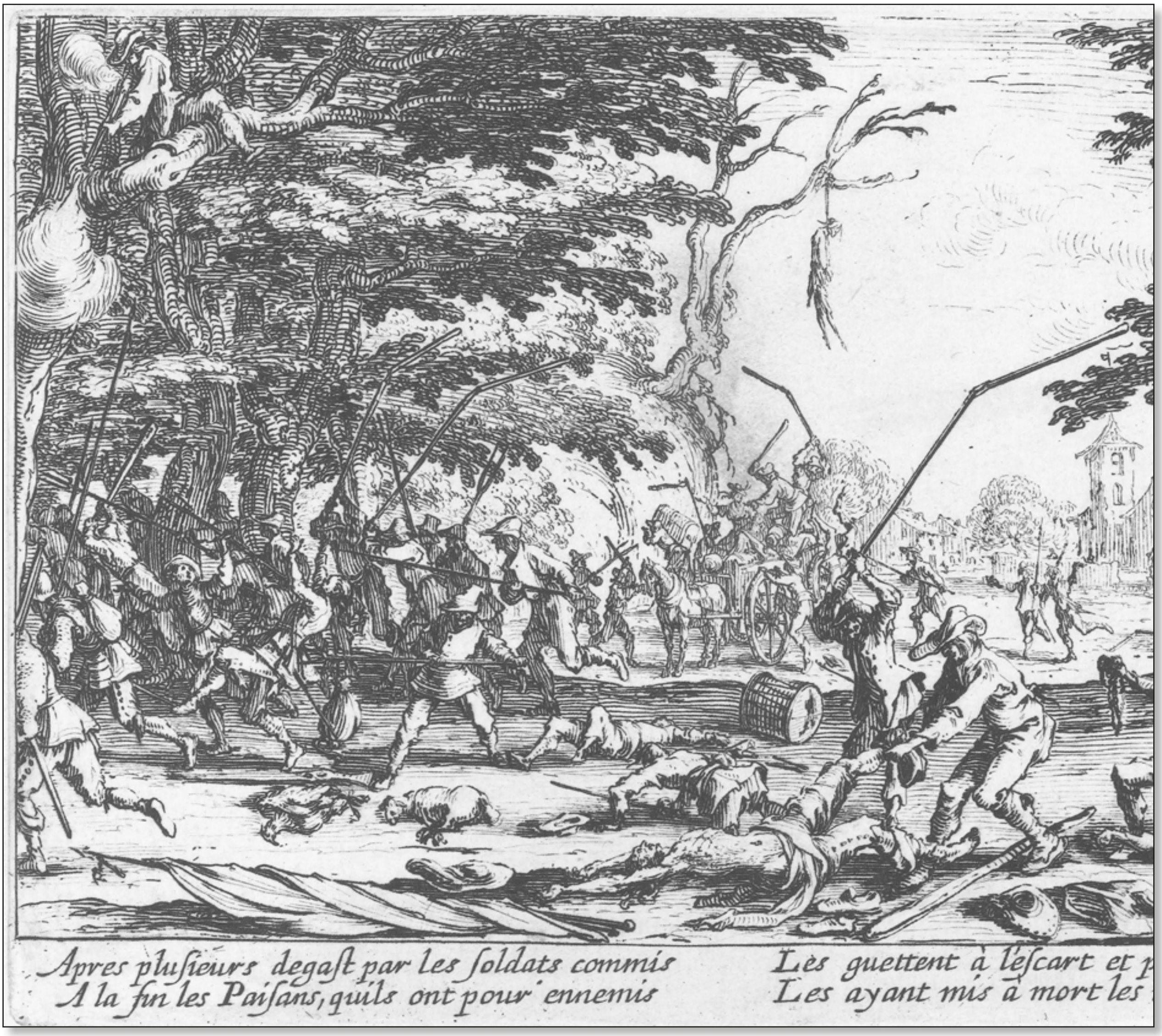
[6] Helfferich, pp.292.

[7] Helfferich, p.275.

[8] Helfferich, p.315.

[9] Theibault, p.150.

[10] Stefan Helml, *Die Oberpfalz im 30jähriger Krieg, der Deutschland und Europa in seinen Bann zog* (Amberg: Scherer, 1990), p.37. The depositions collected after the 1641 Irish Rebellion also mention very few cases of rape by the soldiers.


Apres pluſieurs degaſt par les ſoldats commis
A la fin les Paiſans, quils ont pour ennemis
Les guettent à leſcart et p
Les ayant mis à mort les

Far more common in letters are reports of the land being "utterly wasted", especially the State of Hesse between 1623 and 1625. This included one report from the town of Reichensachen which stated that, "at the beginning of the invasion by Tilly in 1623 this village had 172 hearths, but after the terrible Croatian arson only 72, including the tiniest, remained and in the Gotzian passage another 12 burned down and other houses and barns were set on fire". While in Rambach in 1639, where "more than half the village lays in ashes", there were just seven men, eight widows with their children, two cows, one oxen and one plough.[11]

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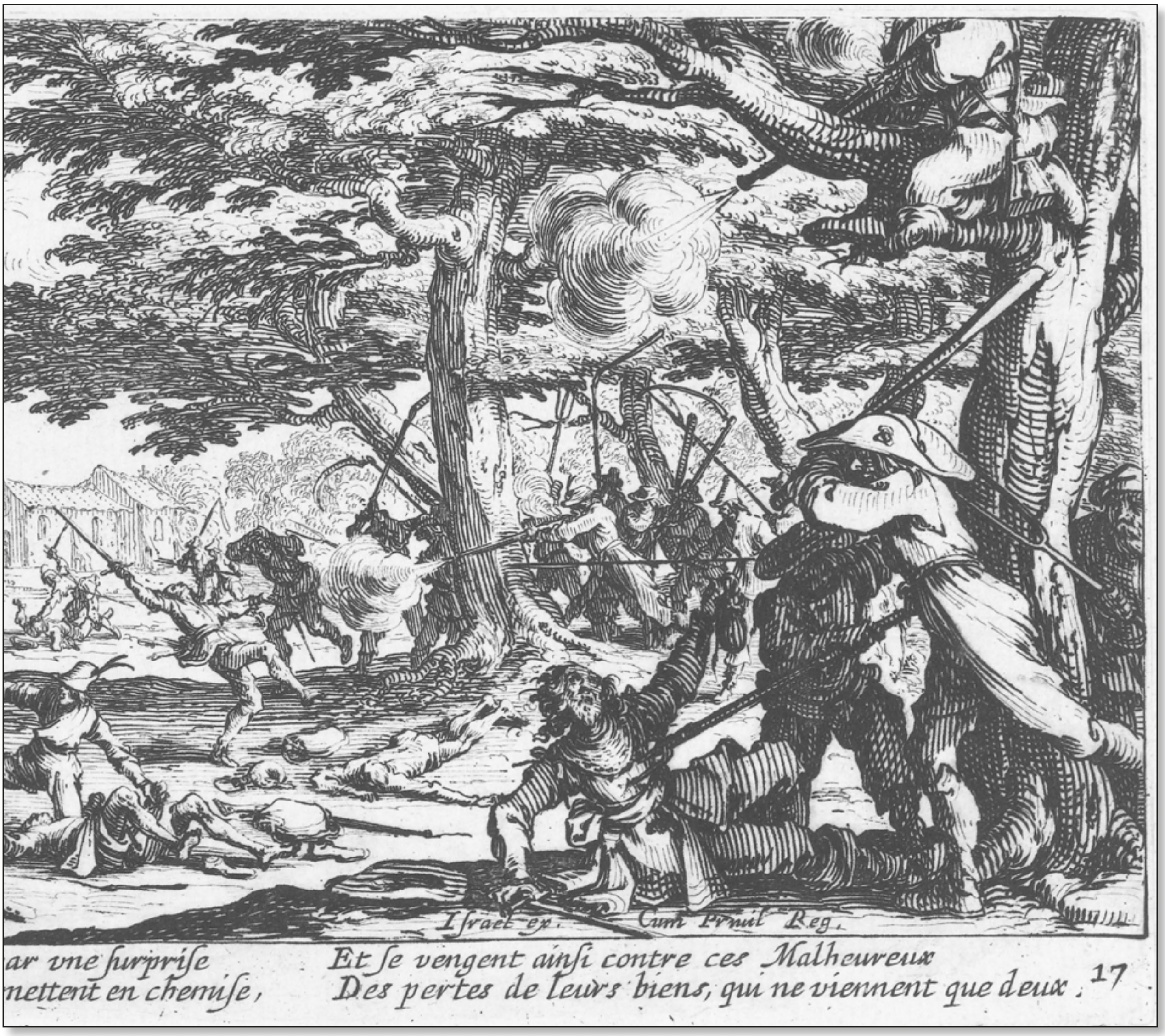
[11] Theibault, pp.155–156.


Iſrael ex.
Cum Privil Reg.
ar vne ſurpriſe
nettent en chemiſe,
Et ſe vengent ainſi contre ces Malheureux
Des pertes de leurs biens, qui ne viennent que deux. 17

“La revanche des paysans” (‘The peasants fight back’), from Jacques Callot’s *Les Grandes Misères de la guerre*, 1633.

Sometimes newspapers reported atrocities being committed, such as in April 1627 when Tilly is said to have “taken Northein and pillaged it with a general massacre”, but the town was reported to be still holding out a month later.[12]

However, it was not just the soldiers who threatened the civilians with violence: the civilians, or boors as they were often called in contemporary sources, could be just as violent. On 2 May 1626 Sir Dudley Carleton wrote to Lord Conway, “The Boors of Hessen have driven out soldiers of Tilly[’s army] quartered upon them and cut in pieces the new regiment of Duke Adolph Holstein.” Sometimes civilians were actually encouraged to attack

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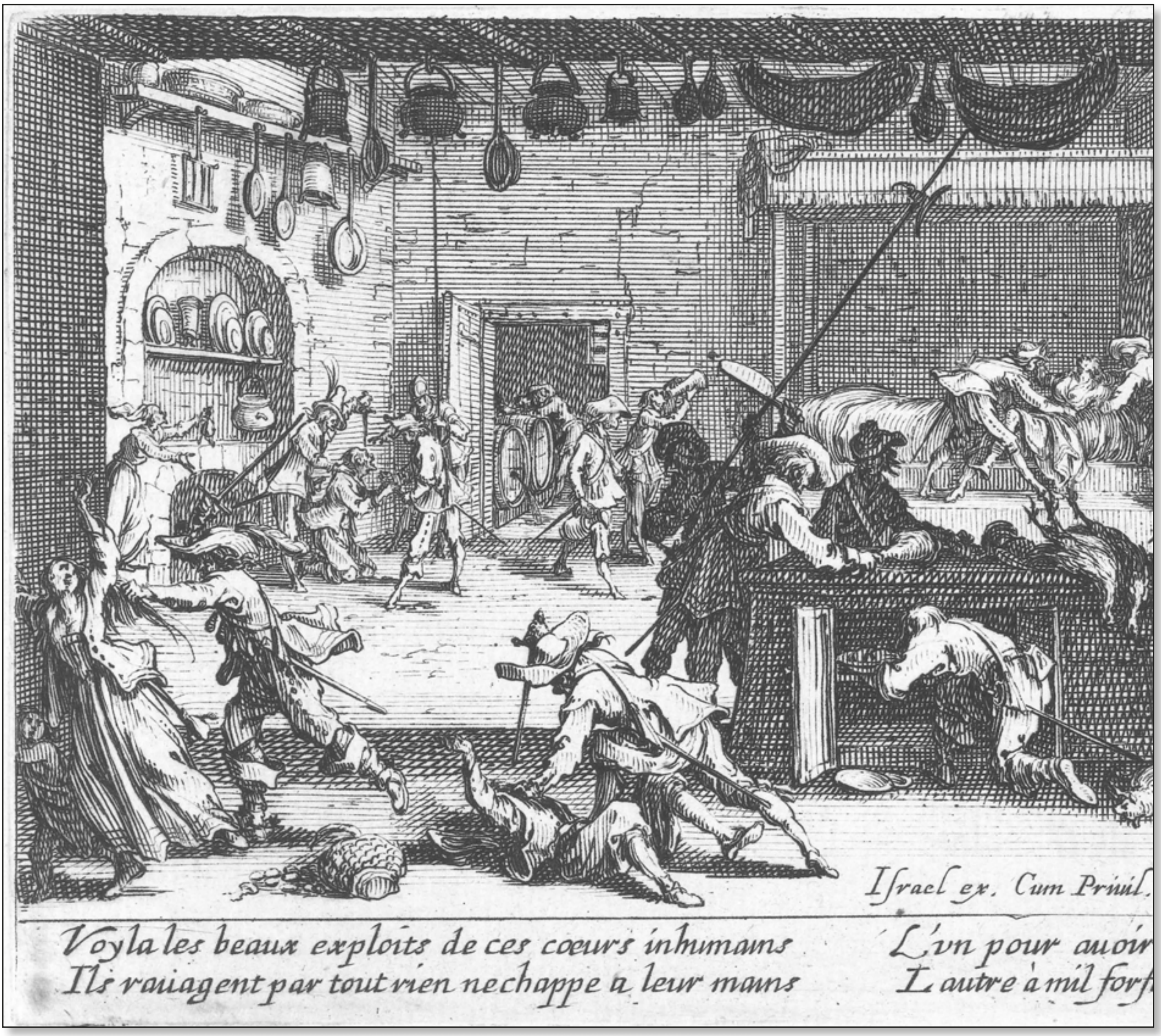
[12] TNA, SP 101/47, ff.147, 200.


Iſrael ex. Cum Priuil.
Voyla les beaux exploits de ces coeurs inhumains
Ils rauiagent par tout rien nechappe a leur mains
L'vn pour auoir
L autre à mil forf

“Le pillage”’ from Jacques Callot’s *Les Grandes Misères de la guerre*, 1633.

the occupying soldiers, as when the Swedish invaded Bavaria between 1632 and 1634, but as Colonel Abraham Loyson pointed out on 22 February 1634, “twelve thousand Boors in Lower Bavaria do more harm to the Duke of Bavaria than our men do to him”.[13]

The most serious outbreak of civil disorder happened in Upper Austria, when Maximilian tried to impose heavy taxation and the Catholic Reformation on its Lutheran inhabitants. In May 1625 the inhabitants of the town of Frankenberg besieged the castle after the appointment of a Catholic priest. Count Adam von Herbersdorf called upon the town leaders and committee members to negotiate with the promise of an amnesty; but

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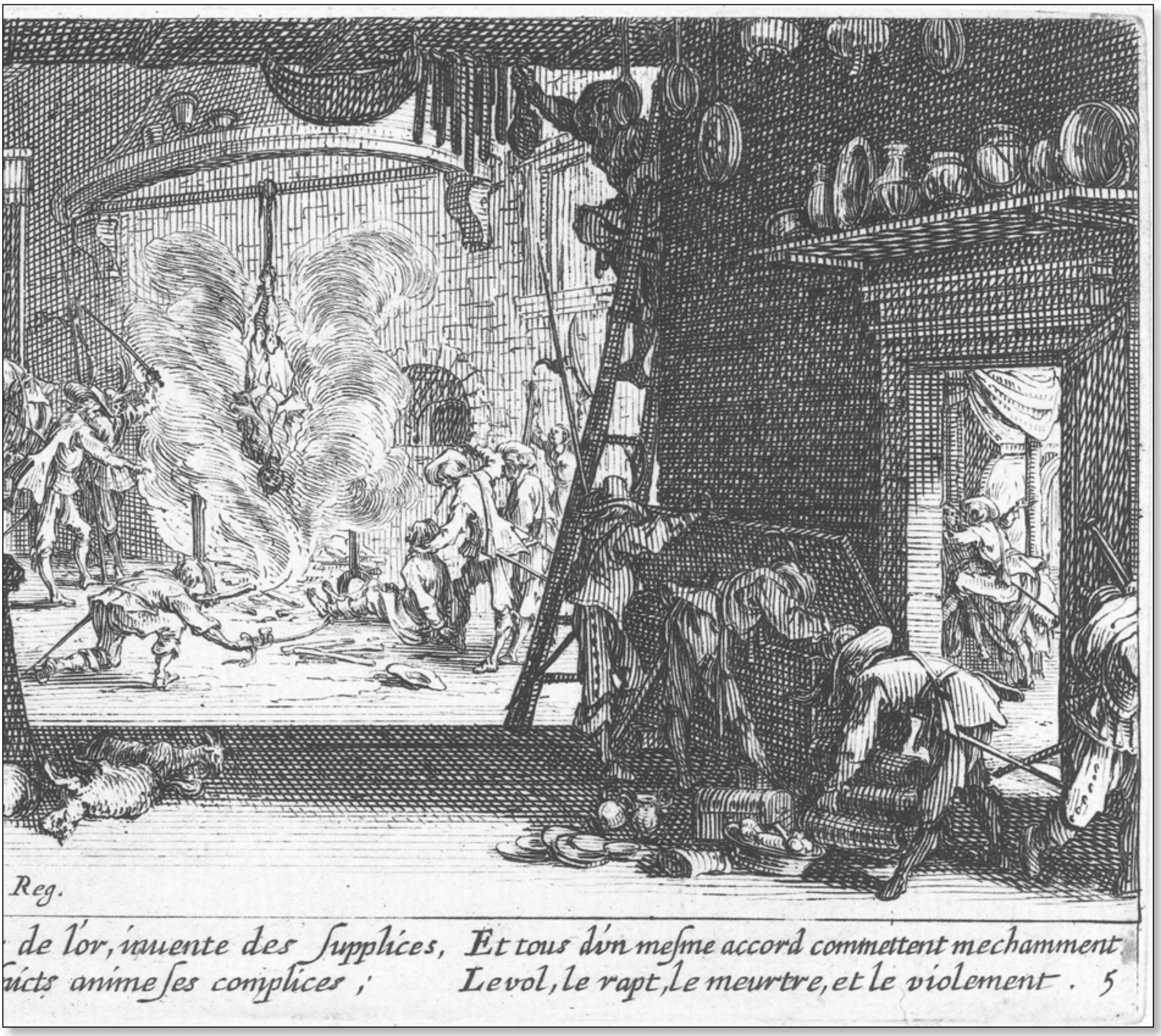
[13] TNA, SP 101/46; SP 101/29 f.117; SP 81/42, f.37.


Reg.
de l'or, inuente des ſupplices, Et tous d'vn meſme accord commettent mechamment
ucts anime ſes complices ; Levol, le rapt, le meurtre, et le violement . 5

Herbersdorf broke his promise and arrested the 38 leaders, who had to dice for their lives. Seventeen people were hanged as an example to the rest, which not surprisingly caused ill feeling and distrust towards the Bavarian occupiers. Those who refused to convert would have to leave their property and become refugees. Thousands of white sticks, the traditional sign of safe conduct, were made and issued to those who refused to convert and wished to emigrate to another province. But this was not enough, and in May 1626 Upper Austria exploded into the revolt known as the "Bauernkreig" or "People's War". Tens of thousands of people took up arms against their Bavarian oppressors, led by leaders such as Stephan Fadinger and Christoph Zeller. Their flags were black with a white skull and their war cry was "Free us, Dear God from Bavaria's yoke and tyranny and its cruel oppression!" On 17 May the small garrison of

25 Bavarian soldiers at Lembach was massacred, before the population moved on to attack Herbersdorf at Peuerbach on 21 May.

On 24 June the People's Army, which by now had conquered most of Upper Austria, besieged Linz, the capital of Upper Austria, which refused to surrender. However, this was the high tide of their revolt, because when the people tried to storm the city they were repulsed with loss including Fadinger. Despite this failure the people laid siege to the city, but on 29 August Linz was relieved by an Imperialist force. Meanwhile there had been other engagements with Imperialist troops fighting them at Enns on 24 July, Neuhofen on 17 August, and at Ebelsberg the following day, plus Leofelden on 28 and 30 August and Schlagl on 13 October.

Pappenheim, with a force of Bavarian troops, was also sent to quell the rebellion, but at Kornrodt on 20 September 1626 the peasants attacked a Bavarian force and massacred three companies of Colonel Gottfried von Hubner's Regiment of Foot, estimated at 700 men, plus 800 men of Colonel Schmidt's Regiment. Hubner and other senior officers including Major George von Planeck of Schmidt's Regiment were killed.[14]

On 9 November 1626 at the battle of Eferding the People's Army sang psalms, then with the battle cry, "Come out, Pappenheim!" they charged the Bavarian ranks, who wavered in the face of this onslaught. It was only the threats and encouragements of Pappenheim himself that stiffened the Bavarians' resolve, but even so the peasants fought with religious fanaticism and were, with difficulty, overcome, but not before the Bavarians had suffered heavy casualties. There were further clashes at Vocklabruck on 18 November and at Pinsdorf on 15 November between Pappenheim and the People's Army, but the results were usually the same: the peasants were defeated, but not before they had inflicted heavy casualties on their opponents. The Imperialists and Bavarians seized municipal leaders and hanged them as an example to the rest, and the parish register of Lasberg records the death of 31 men and that of St Oswald 20, who went willingly to their deaths. With the deaths of their leaders and the large-scale slaughter of the people the 1626 uprising was defeated, although there would be further uprisings in the following years, none were as serious as that of 1626.[15]

The Upper Palatinate, which was also annexed by Maximilian in lieu of payment for his war expenditure, was a different matter. In April 1623 it was reported that 200 monks and Jesuits were ready at Munich to be sent to the Upper Palatinate as part of the Counter-Reformation, and by May 1625 the Protestants in the state were forced to go to an assigned church each day to be instructed in the Catholic religion by the Jesuits. Some did leave, but many could not afford to do so or had no where to go, so they had to listen to these masses, and in years to come the Upper Palatinate was one of the most ardent areas of Catholicism in Germany.[16]

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[14] Stadler, p.207.

[15] George Heilingsetzer, *Der Oberösterreichische Bauernkrieg, 1626* (Vienna: Militarhistoriche Schriftenreite, 1976).

[16] TNA, SP 101/28, f.291; SP 101/42, f.243.

However, the most infamous event of all the atrocities during the Thirty Years' War is the sack of Magdeburg on 20 May 1631. When Gustavus Adolphus landed in Germany, Tilly planned to confront him before he could consolidate his position. However, according to the treaty of Barwalde, Bavaria was technically a Swedish ally along with France, therefore Maximilian ordered Tilly to besiege Magdeburg instead. Although technically also an ally since it had declared for Gustavus, it was an Imperial city which had challenged Ferdinand II's authority.

At first Count Wolfgang von Mansfeld, who commanded the area around Magdeburg, began to blockade the city, but he was not strong enough to entirely surround it. It was divided into three, the old and new towns and the "Sudenberg", and in 1572 was described as "the noblest city in Saxony … there are splendid houses, magnificent streets, large and richly decorated churches; the church of St Maurice built by the Emperor Otto is particularly handsome." It was at St John's Church where Martin Luther is said to have preached his Reformation ideas.[17]

Magdeburg's alliance with Sweden had provided little benefit for the city either in money or troops, so it would have to rely mainly on its garrison of about 2,000 foot and 200 horse; moreover many of the city inhabitants wanted to stay loyal to the Emperor, rather than support a foreign invader. To encourage the city Colonel Dietrich Falkenburg arrived with promises of support from Gustavus Adolphus, but he brought little else. Falkenburg was appointed governor and began raising more troops and erecting new fortifications to protect the medieval walls, which were surrounded by a moat. The Heydrick fort was erected near the Sudenburg and two hornworks were placed in front of the city. Protecting the bridgehead on the other bank of the Elbe was a star fort known as the "Zoll Schants". There were further outlying earthworks, but these needed to be garrisoned, so weakened Falkenburg's force.

It was around this time that, in a superstitious age, what was seen as a bad omen occurred. On 26 November 1630 a furious storm burst over Magdeburg which damaged many of the city's defences, and the following month Pappenheim arrived before the walls. Although both his and Mansfeld's forces were still not strong enough to take the city by storm, this did not stop them from trying, and several attacks were beaten off. They even offered Falkenburg 400,000 rixdollars and promotion to field marshal in the Imperial Army if he would surrender, but to no avail. The lack of progress of the siege caused ill feeling between Mansfeld and Pappenheim, who both complained to Vienna about the situation. Unfortunately their despatches were captured by a patrol from Magdeburg and published.

Meanwhile the siege went on through the winter, with the men of the besieging force freezing in their trenches and encampments, whilst the garrison of Magdeburg was quartered in houses within the city. On 3 April 1631 Tilly's main army arrived with his siege artillery, but far from being a precursor to storming the city many believed that Tilly would abandon the siege altogether: Gustavus Adolphus had taken Frankfort on the Oder on

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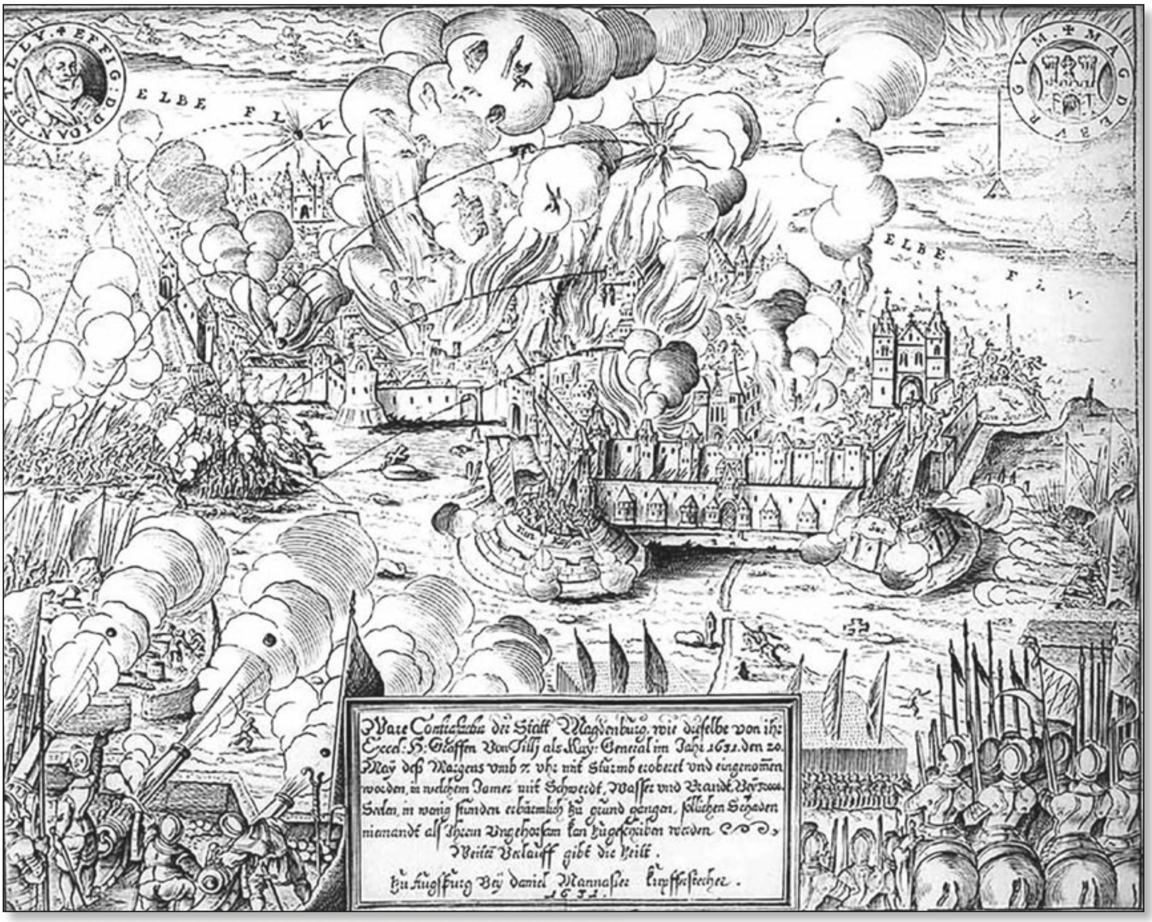
[17] Georg Braun and Franz Hogenberg, *Civitates Orbis Terrarum*, vol. I (Cologne, 1572).


ELBE FLV
ELBE FLV
Ware Contrafactur der Statt Magdenburg, wie dieſelbe von ihr:
Excel: H: Graffen Von Tilly als Kay: General im Jahr 1631. den 20.
May deß Morgens umb 7. uhr mit Sturmb erobert und eingenomen
worden, in welchem Jamer mit Schwerdt, Waſſer und Brandt Verloren
Seelen, in wenig ſtunden erbärmlich zu grund gangen, ſollichen Schaden
niemandt als ihrem Ungehorſam kan zugeſchriben werden
Weiter Verlauff gibt die Zeitt.
Zu Augſpurg Bey daniel Mannaſſer Kupfferſtecher.
1631.

The sacking of Magdeburg, 1631.

13 April and was believed to be marching to relieve Magdeburg. At about this time another ill omen occurred for the inhabitants of Magdeburg, when the wife of a captain within the garrison was dying in childbirth. She begged her husband to cut their baby out of her womb, such was her agony, but on doing so it was said that the baby was as large as a three year old, "with a headpiece and an iron breastplate upon him; great boots of the French fashion and a bag by his side", ready to defend the city. In reality it was probably just a baby who was too large to be born naturally, and possibly had a deformity.[18]

With Tilly's arrival the besieging force was able to press home its attacks with more force, and several of the satellite forts fell to Tilly. According to Count Galeazzo Gualdo Priorato:

> Tilly kept his quartered about the sconce of Zoll; Count Pappenheim environed the ways that led to from the New Town; the Duke of Holstein enlarged his quarters almost to the Croken and Count Mansfeld bound to the precincts of the camp with his station on the side of the Haydeck and the Fort Marsh. They

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[18] William Watts, *The Swedish Intelligencer*, part 1 (London, 1633), part 1, p.115; L. Brinckmair, *The Warnings of Germany By Wonderful Signs and Strange Prodigies* (London: John Norton, 1638), np.

> had already made their approached on these four sides, even to the edge of the counterscarf; but their entrance thereupon was hindered by the continual playing of the cannon and muskets from the tower.[19]

Still, rumours were rife in the city that Gustavus would shortly arrive. Tilly pressed forward with attacking the forts nearer to the city, especially the Zoll Schants, which the Duke of Holstein and Colonel Wangler were ordered to take. After several days' bombardment they attacked the Zoll Schants but were beaten off, but finally it was taken along with several other forts so that the besiegers were now in close proximity to the walls of Magdeburg itself. At the beginning of May the new town fell to Pappenheim and Sudenburg to Mansfeld, leaving only the old city holding out.

With preparations for the storming of the city visible to the garrison on 18 May, Tilly sent a trumpeter to demand Magdeburg's surrender, but the city council would only agree that the Bishopric and city might still enjoy all their privileges, which Tilly rejected. The following day the garrison beat off an attack by Pappenheim and destroyed the besiegers' mines, nevertheless Tilly sent another trumpeter to negotiate the city's surrender. That evening the sentries observed movement in the besiegers' camp, which the garrison believed was Tilly preparing to raise the siege. With this in mind, according to the *Swedish Intelligencer*, the sentries got some sleep.

That day Tilly had held a council of war which decided that his forces should storm the city early the next morning on four sides. Spies had informed Tilly that few sentries were kept to man the fortifications. The firing of 30 pieces of ordnance before daybreak would be the signal to attack, although another source said just one piece was to fire the signal, but it failed to do so. A third source suggests that Tilly had appointed a certain time when the main assault was to take place, although he delayed it for a further hour, but Pappenheim was not told of this revised timetable, so attacked an hour early.[20]

Whatever the signal, the events that followed would send shockwaves around Europe, as one newspaper, *Continuation of our Foreign News*, put it: "No pen is able to write, or tongue express the woeful and lamentable tragedy lately happened at the taking of the city [of] Magdeburg."

Pappenheim with his own regiment, and those of Wangler, Savelli and Gronsfeld – which on paper mustered about 5,100 men, although in reality was probably much weaker – was to attack from the new town, and Count von Holstein would fall on a hornwork before the Crock Port. Count Wolfgang von Mansfeld with Tilly's men would assault the Heydick. Three Imperialist regiments with the remainder of the Tilly's soldiers would attack a new work upon the marshes between the bridge and the river.[21]

In Pappenheim's quarter Captain Jurgen Ackermann, whose company along with that of Captain La Croy, both of Pappenheim's Regiment, appears to have formed a forlorn hope; the soldiers were given a "good Rhinish wine" to encourage them, and charged the defences. According to one anonymous pamphlet:

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[19] Priorato, p.27.

[20] *A Brief and True Relation of the taking in of Magdenburck by the Emperors' and the Catholic League, 10 May 1631*. BL, C194a 836.

[21] *A Brief and True Relation of the taking in of Magdenburck.*

> Pappenheim had the best advantage, because he was to pass over a dry moat with him men and having no parapet or defence upon the wall and the wall itself hanging down stoop wise, in so much it was very mountable. Seeing then that the work was but slightly manned … [with] not above 30 men in this work and the most of them asleep he fell upon that work, and carried it easily without any great loss of men.[22]

However, Ackermann recalls there were 400 defenders waiting for them, though the attackers managed to up root the wooden staves in front of the walls and "turfs and faggots" were thrown into the ditch to fill it in. All this time some musketeers were trying to keep the garrison's heads pinned down with their fire. Once the first line of defences had been breached, Ackermann and La Croy's companies came to the walls themselves. "There was such a thundering and crashing of muskets, mortars and cannon that nobody could neither see nor hear." By now the main body of attackers was pressing forward, crushing the forlorn hope against the defences so that "the whole rampart was filled, covered and black with soldiers and storm ladders".[23] According to Priorato:

> It proving very hard for the soldiers to scale those high walls with their ladders, they being likewise so well flanked with opposite bulwalks, they were forced to give over with no little loss. Pappenheim notwithstanding … egged on his soldiers, assuring them of rich booties and threatening those that should give back [that is, retreat]; and though many tumbled from off the ladders into the ditches; yet their places were continually supplied by fresh men, who enraged at the difficulty they met.[24]

Some of the ladders were found to be too short, but after a fierce struggle the League troops breached the walls and entered the city. They captured several pieces of ordnance and turned them on the city itself, while others pursued the fugitives of Count Falkenburg's Regiment through the streets. Falkenburg made a stand in Lakenmacher Street and the pikemen of the storming party were called up, but according to Ackermann they were too intent on plundering the city and had broken their pikes, so they arrived with only short pikes. Falkenburg led a counter-attack which drove Pappenheim's men back to the walls, but when he was struck down by a musket ball the attack soon petered out. It was probably about now that Hagendorf, who was a musketeer in Pappenheim's Regiment, was wounded. "There I entered the city by storm without incurring any injury", he recalls, "but once in the city at the New Town Gate, I was shot twice through the body, that was my booty."[25] By now Pappenheim's men had managed to open one of the city's gates to let more men inside.

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[22] *A Brief and True Relation of the taking in of Magdenburck.*

[23] Volkholz, p.14.

[24] Priorato, p.28.

A Captain Schmidt from the garrison led a second counter-attack which beat the Imperialists back to a bulwark, but Schmidt was also seriously wounded and the attack lost momentum and finally the garrison was driven back. These may have been Holstein's men who had broken through the defences after a stubborn resistance from the garrison, and with Pappenheim's men the garrison men were either killed or pushed back to the cathedral.[26]

What of Mansfeld's force? The anonymous pamphlet accused Mansfeld of cowardice, having "stayed a good while, thinking it was good sleeping in a whole skin". Whether he did not hear the signal is unknown, but:

> He fell upon the Haydeck and gave not on until Pappenheim and other regiments had possessed themselves of more than half the town, but at last falling on, they [the garrison] resisted him valiantly, and he was twice beaten back, so that he was not able to enter there, but at last those of the town seeing that all was lost, their own men opened [for] him the Ulrick port of the city and so gave them entrance.[27]

However, other Imperialist troops also appear to have attacked late: "seeing the town was taken in, then they began to fall upon it, howsoever they found no less resistance, than the Mansfelders had done before till at length they were let in willingly".[28]

According to one Protestant newspaper:

> In this hot and furious assault they spared none, but slew all in their way, except only some of the soldiers which sheltered themselves for a while in the Cathedral Church. Most of the citizens were slain and burnt for the city was fired in divers places in so much that the whole city in a short space was in a blazing flame. The soldiers and the fire both alike cruel, devoured men, women, maidens and children. The women and maidens which were escaped from the heat of the fire … were preserved for the heat of these miscreants lusts, which they drew along with them into their army and even like beasts were sold and conveyed to the use of one after another, in a savage, barbarous, unnatural and inhuman manner.[29]

It was said that one woman to save her "chastity" threw herself into a well and drowned, while two soldiers "found an innocent child lie crying and sprawling in the street, the one took one leg and the other another leg and pulled it in pieces". In another incident a soldier in Pappenheim's Regiment boasted that he had stabbed more than 20 children and in one church the survivors found the remains of 53 people whom the soldiers had beheaded, then chopped their heads in two. One man was attacked by four soldiers; he begged for mercy but one soldier stabbed him and another struck him about the head before a third soldier finally chopped off his head with an axe. Finally the fourth soldier cut off his penis. Unfortunately, in the war of words that followed the destruction of the city, we will probably never know whether these incidents were true or the imagination of a propagandist's pen.[30]

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[25] Peters, p.47.

[26] *A Brief and True Relation of the taking in of Magdenburck.*

[27] *A Brief and True Relation of the taking in of Magdenburck.*

[28] *A Brief and True Relation of the taking in of Magdenburck.*

[29] *The Continuation of our Foreign News*, 10 June 1631 no. 30 (London: Butter and Brown, 1631), pp.7–11.

Nevertheless, not all atrocities can be dismissed as propaganda. Scientist Otto von Guericke was about 29 at the time and later recorded:

> Thus it came about that the city and all its inhabitants fell into the hands of the enemy, whose violence and cruelty were due in part to their common hatred of the adherents of the Augsburg Confession and in part to their being embittered by the chain shot which had been fired at them and by the derision and insults that the Magdeburgers had heaped upon them from the ramparts.
>
> Then was there nought but slaughter and burning, torture and murder. Most especially was every one of the enemy bent on securing much booty. When a marauding party entered a house, if its master had anything to give he might thereby purchase respite and protection for himself and his family till the next man, who also wanted something … It was only when everything had been brought forth and there was nothing left to give that the real trouble commenced. Then, what with blows and threats of shooting, stabbing and hanging, the poor people were so terrified that if they had had anything left they would have brought if forth if it had been buried in the earth or hidden away in a thousand castles. In this frenzied rage, the great and splendid city … [was] given over to the flames, and thousands of innocent men, women and children, in the midst of a horrible din of heartrending shrieks and cries, were tortured and put to death in so cruel and shameful a manner that no words would suffice to describe.[31]

Hearing that Tilly's army had entered the city many civilians shut their doors hoping that the soldiers would pass them by; among them was the Friese family. Daniel, who was then a young boy, records that the victorious soldiers were hammering on the doors of the houses threatening to kill everyone inside if they were not let in:

> We had to let them in; they soon attacked father and mother and craved money; they were only two musketeers. Father and mother gave them the money they had with them, as well as some clothes and utensils. They were satisfied with this, and only asked for shoes and went away again. We pleaded that they help us get away … but they didn't listen because they said they had to find booty first.[32]

However, more soldiers arrived and threatened Daniel's parents, until they also were paid to go away. Daniel's family decided to flee to a nearby stable, but this did not stop the soldiers. Hearing a commotion outside Daniel's father rushed out into a yard to see what was happening, followed by the rest of his family. They found about seven musketeers, who "spoke a foreign tongue and no one understood what they said. They kept putting out their hands for money". By now the family had no more money to give so the musketeers fired at Daniel's father; fortunately they missed, so the soldiers chased the family back into the house and proceeded to ransack it for any valuables which might have been missed by the previous groups of soldiers. Once these soldiers had left in search of more plunder the family hid once more, this time in the attic of their house. However, a soldier spotted their maid running inside and followed her and found the family's hiding place. He was about to hit Daniel's father when Daniel's younger brother intervened with a promise that he would give the soldier his pocket money, which he received on Sundays, if he let his father live. This brought the soldier to his senses, and he agreed to help them, but first he needed to find some plunder and told the family that he would return to help them. The family remained hidden not knowing whether the soldier would keep his promise.

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[30] Mary Noll Venable, 'Evenius and the Siege of Magdeburg' in Emily Nicholson et al. (eds), *Linking of Heaven and Earth* (Farnham: Ashgate, 2012), p.118; *A Brief and True Relation of the taking in of Magdenburck.*

[31] Helfferich, pp.108–109.

[32] Quoted in Wilson, *The Thirty Years War: A Sourcebook*, p.158.

The intervention of a wife or child saved many from the soldiers' lust for blood; among them was Christopherus Theodaenus who was the pastor of St Katherine's church. When soldiers burst into his house demanding money, and he said he had no more money to give, "one who looked like the Devil himself having two muskets and in his mouth a ball in each side", was about to fire one of his muskets at the pastor when his wife struck the musket upwards so that the ball missed her husband, and she held the soldier so that he could not move. She then remembered that the hooks that fastened her bodice were made of silver, so she offered them to the soldiers. Once she had cut them off and given them to the soldiers, they left.[33]

Meanwhile the soldier who had promised to return for the Friese family was as good as his word and returned to them. He led them through the streets of Magdeburg:

> As we went through a couple of alleys, we saw various dead laying atop each other, and often in the great crowd we had to step over the corpses. Amongst others we saw a peasant jump out of a gable, who was scalded by hot water, and he was smoking mightily. He lay in the alley writhing and crying piteously. Farther along the alley lay a maid, who had been carrying meat in a basket. She had been shot, and a dog was standing nearby eating the meat … We saw very many dead in the alleys and a number of women lying totally naked, with their heads in a large beer barrel, which was standing full of water in the street. They had been pushed in and drowned, but half their bodies and their legs were hanging out, which was a wretched spectacle.[34]

Daniel Friese and his family eventually arrived at the army's encampment and the soldier took him to his hut, where his reward for helping the family was to be scolded by his wife for bringing back so little plunder. The Friese family watched Magdeburg in flames and Daniel records that "you could have read a letter by the glow of the fire".

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[33] Hans Medick, 'The Destruction of Magdeburg', in *Historical Workshop Journal* (Oxford University Press, Autumn 2000), p.39.

[34] Quoted in Wilson, *The Thirty Years War: A Sourcebook*, p.162.

Even the officers joined in the plundering of the city. Captain Jurgen Ackermann of Pappenheim's Regiment of Foot, who had lost 72 men of his company during the storming, records that in one house near the old market he found a shopkeeper who in return for his life showed Ackermann a locked iron chest. After Ackerman and several of his soldiers hacked a hole in the side of the chest they found some gold and silvery cutlery and a gold chain with a jewel.[35]

Leaving her husband recovering in the army camp with their sick child, Peter Hagendorf's wife went in search of plunder and some cloth to make bandages, but while he was lying in his hut he recalls:

> there came a great outcry in the camp that the houses of the city were all collapsing on top of each other so that many soldiers and their wives who had wanted to loot were trapped. But I was more concerned about my wife … yet God protected her. She got out of the city after one and a half hours with an old woman from the city.[36]

The old woman was a widow who had probably agreed to help carry Peter Hagendorf's wife's plunder in return for safe passage. This is how Simon Printz, who was a constable and gunsmith of Magdeburg, was saved. With no money and valuables he could do nothing but offer to carry the soldiers' booty away for them.

Some inhabitants sought sanctuary in the cathedral and churches, but soldiers burst into St John's Church, which according to one Swedish account, "was full of womenfolk, whom they locked in from the outside, thereafter throwing burning torches through the windows. The Croats and Walloons behaved mercilessly, throwing children into the fire."[37] Another account records that the preacher of St John's, Andreas Krammer, tried to protect himself with a Bible, which seems to have saved the pastor as he died in 1640. However, this "Blood Bible" still shows signs of a sword cut where a soldier is said to have slashed at him. Another newspaper continues:

> Murdered all there and this continued three hours in which time the city was set a fire in four or five places, and it is yet unknown whether it was done by treason or by the immediate hand of God, but the sudden increase and fierceness thereof was such by reason of a wonderful wind, that in a short time all the fires met, and the spoilers that plundered were forced to leave the most part of the women, maids and children were smothered and stifled in vaults and cellars, where they had hid themselves. Some part of them driven into the fire by violence. Many others thrown into the fire and part of the beautifully young women and maids carried into the camp, there forced, spoiled and carried away in the meanwhile, yea even on that very day was the whole city, with all the inhabitants so wasted

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[35] Volkholz, pp.16–17.

[36] Quoted in Helfferich, p.283 .

[37] Quoted in Gerhard Benecke, *Germany in the Thirty Years War, documents of modern history* (London: Edward Arnold, 1978), p.35.

> by the fire and sword that on the Wednesday morning their remained no more standing, but the cathedral church and a very few houses standing about it. All the rest, both men and beasts, consumed to ashes, that the sword left. And none escaped except some very small number that were here and there which with very great peril ran away …
>
> In this manner as is set down that brave city of Magdeburg, by fire and sword, was in one day consumed with many thousands of Christian poor souls therein.[38]

According to Otto von Guericke the plundering by the soldiers lasted just two hours:

> But in this time the fire, which had originally been ordered by Count Pappenheim in order to perturb and fright the citizens and inhabitants, but which had afterwards been used by the common soldiery without discretion or pause, took the upper hand by means of the sudden appearance of the wind, so that by ten o'clock in the morning everything was afire; and by ten o'clock in the evening the entire city, including the beautiful courthouse and all the churches and cloisters, had been reduced to ashes and heaps of stone.[39]

In his *History of the World*, which was published in 1640, Alexander Ross records that the weather also played its part: "The Garrison and townsmen fought stoutly so long as they were able, till the Caesarians [Imperialists] to quiet them set the City on fire, which proved as prejudicial to the besiegers, who thereby lost their plunder, as to the townsmen who lost their habitations; for the fire was so violent by reason of the wind."[40]

Who or what started the fire is not known. Pappenheim is said to have ordered a house to be set on fire so that the smoke would cover his soldiers' movements, whereas Captain Ackermann said that two houses were fired to drive the defenders from the walls. Count Priorato blamed it on "the carelessness of a soldier who throwing aside his musket with the match lighted to get up the stairs in a drugster's house, the match set fire to a barrel of Brimstone and this taking hold of other combustible matters, the fire did so dilate itself, as the houses being built of wood all was destroyed".[41]

However, according to *The Continuation of our Foreign News*:

> Those few that are escaped, related that the whole city is almost quite burnt down, and there are not above three citizens' houses standing whole in the city except only about the cathedral there stand some 70 houses, which the fire hath not consumed. The cruelty of the soldiers was so great that the citizens with their wives and children, (as it is reported) would rather suffer death, then stand to

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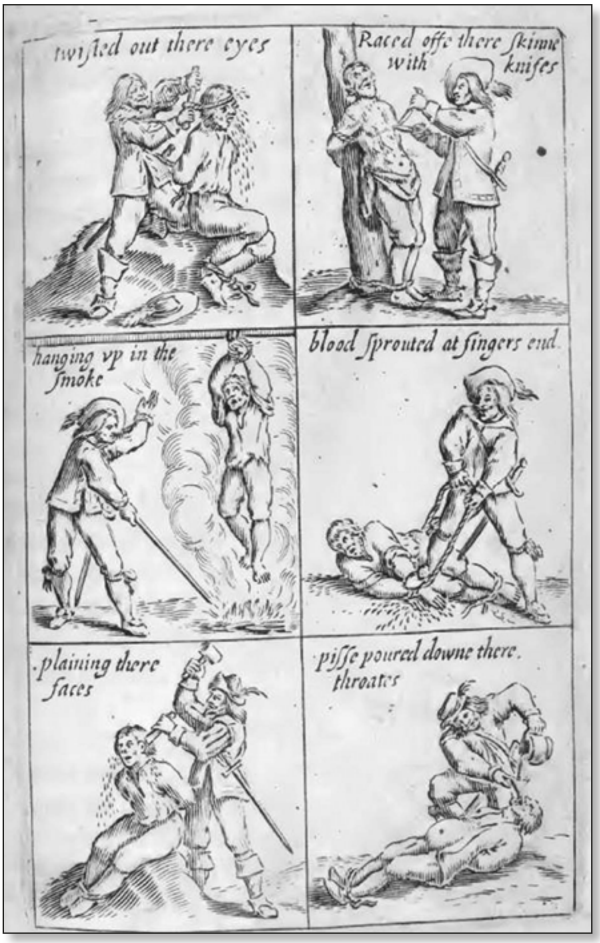
[38] "A true information what manner the city of Magdeburg was overthrown", in the *Continuation of our forraine Newes* (London: May 1631), pp.384–385.

[39] Helfferich, p.109.

[40] Alexander Ross, *The History of the World the second part in six books being a continuation of famous history of Sir Walter Raleigh knight…* (1640), pp.384–385.

[41] Priorato, p.28.


twiſted out there eyes
Raced offe there ſkinne with knifes
hanging vp in the ſmoke
blood ſprouted at fingers end
plaining there faces
piſſe poured downe there throates

Above, facing page and overleaf: soldiers committing atrocities during Thirty Years' War. From "Lacrymae Germaniae (The Tears of Germany)", published in London in 1638. (Michał Paradowski's archive)

> the cruel mercy of these barbarous soldiers, and fall into their hands; which was the cause that they fired their own houses.[42]

Alexander Ross continues:

> This great and stately City was in a space of four and twenty hours burnt down to the ground, in which six parish churches were consumed in the same fire, all the churches, streets and high ways were covered with dead bodies, in the Cathedral of St Catherine were found three and fifty murdered, the governor being wounded in his head and thigh is carried away prisoner with most of the chief men and Ministers; the barbarous soldiers spares neither sex nor age, abusing even young girls to death; yet the High church and the monastery of St Mary were saved from the fire, and so were 139 houses, but all the inhabitants were either slain or taken, the number of slain is not certain, but it is reported that two and twenty thousand were flung into the River Albis which flows by the city; six hundred townsmen were chained, though they were able to ransom themselves.[43]

The *Swedish Intelligencer* also recalls that while the battle and plundering raged:

> A mighty fire breaks out (how, none knows) and it being a great windy day, all was on the sudden become one great flame: the whole town was in twelve hours space, wholly turned to cinders, excepting 139 houses. Six goodly churches are burnt; the cathedral together with St Mary's church, were by the monks and soldiers' diligence preserved.[44]

Some of these six churches may have included St Jacob's, St Catherine's and St Patrick's, which would not appoint new pastors until 1659, 1679 and 1690 respectively. On the other hand St John's and St Ambrose's held services soon after the sack of the city. Whoever was to blame for the fire, it is estimated that of the 1,900 buildings within the city 1,700 were destroyed. It was also said that over 20,000 people perished in Magdeburg that day, the city's population being swollen by the inhabitants of the surrounding countryside who had sought protection within its walls.

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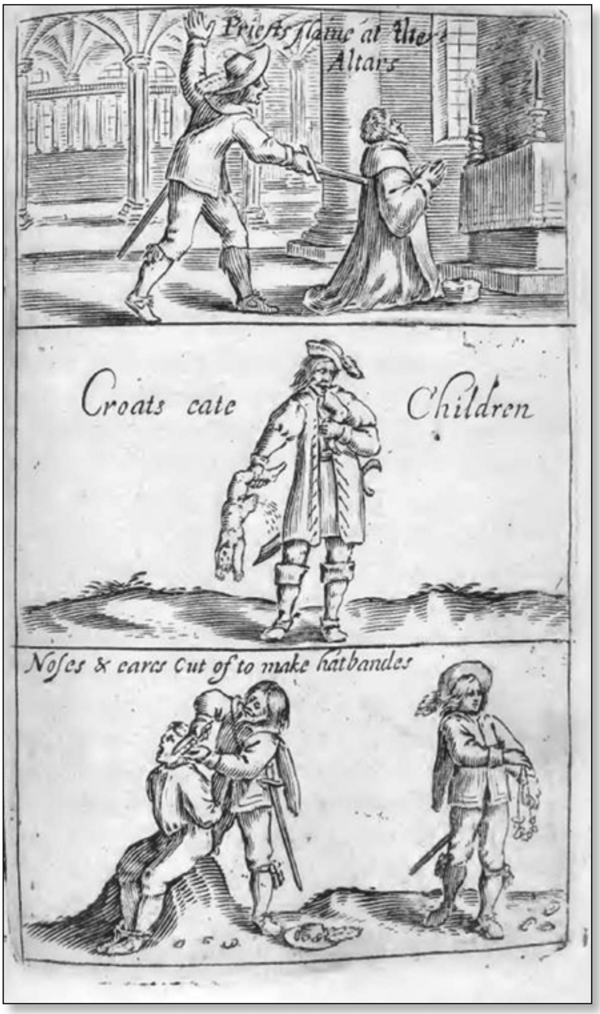
[42] *The Continuation of our Foreign News*, no. 30, 10 June 1631 (London: Butter and Brown, 1631), pp.7–11.

[43] Ross, pp.384–385.

[44] Watts, *The Swedish Intelligencer*, part 1, p.114.


Priests slaine at the Altars
Croats eate Children
Noſes & eares Cut of to make hatbandes

On 22 May Tilly entered the ruins of the city and the following day forbade any more pillaging, and on 25 May a *Te Deum* was held in the cathedral for his victory. However, it was a hollow victory as he had wanted to capture the place with all its provisions, intact. Moreover he and Pappenheim would go down in history as having destroyed Magdeburg. Newspapers claimed that Tilly had all the corpses thrown into the river, whilst his soldiers had a Christian burial. Another newspaper reported on 28 May that "all the dead carcases are now almost conveyed out of this city, which have sorely pestered and annoyed us hitherto [by the smell] … and are cast into the River Elbe. There were many of them so disfigured that it was impossible any way to discern who they were." Many of these bodies had been burned and there were too many to bury, so throwing them into the Elbe was seen as the best way of disposing of them before disease broke out, since it was believed that disease was carried by smell rather than bacteria.[45]

On 22 February 1632 Christoph Schultz, a commissioner, held a census of the remaining inhabitants of the city and found that in the old city there were just 239 men, 117 widows and a single burgomaster; in the Sudenburg and the borough of St Michael were 15 men and seven widows and in the new town were 39 men, 30 widows and a burgomeister. This was 449 inhabitants in all, as noted by Frederich Hoffman, who wrote a history of the city. This figure has been widely repeated ever since by historians. However, there are no wives or children mentioned in this census, therefore the figures must show the heads of households rather than the number of people, which increases the number of the population of Magdeburg considerably. Furthermore, it also gives a greater number of houses that survived the fire or had been repaired than previously thought; even so this still leaves a considerable part of the city that was destroyed.[46]

Among the survivors of that fateful day was John Neesing, a burgher and counsellor, who in September 1633 petitioned the English government on behalf of "his wife, children and kindred (to the number of 33 persons) [who] made an escape and saved their lives from the bloody slaughter and fire but lost all their goods and estates". They had maintained themselves through the charity of foreigners, but now asked King Charles I to grant a

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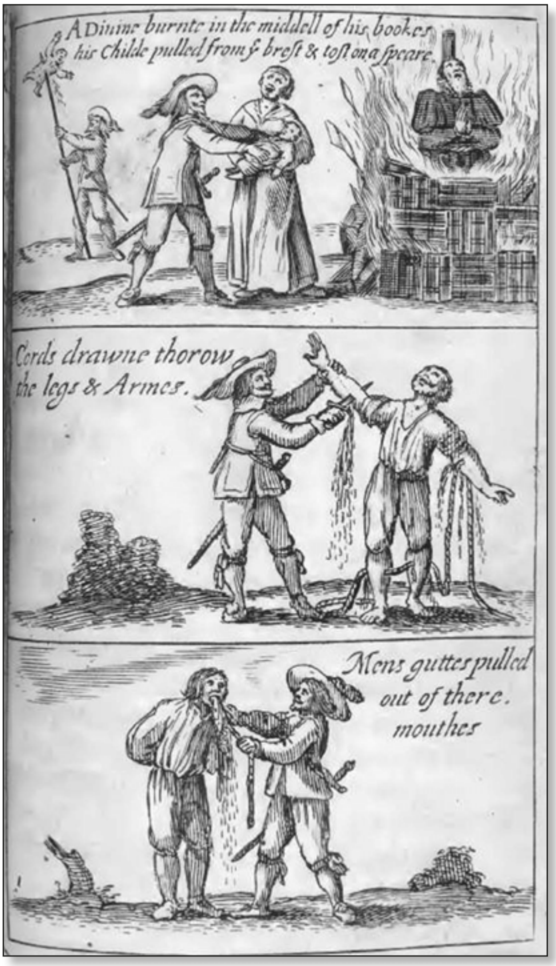
[45] *The Continuation of our Weekly News from Forraine Parts*, no. 31, 25 June 1631 (London: Nathaniel Butler and Nicholas Bourne), p.5.

[46] Friederich Hoffman, *Geschichte der Stadt Magdeburg* (Magdeburg: E. Baensch, 1885), vol. 2, p.215.


A Diuine burnte in the middell of his bookes
his Childe pulled from ÿ brest & tost on a speare.
Cords drawne thorow the legs & Armes.
Mens guttes pulled out of there. mouthes

"royal licence for a collection of charity in your city of London and such other shires and places as your Majesty please". The petition was passed to the Lord Keeper, who rejected it since there was too many other petitions needing his attention. Nevertheless, at the beginning of March 1634 John Neesing did receive £5 for the upkeep of him and his family. What became of any of them is unknown, but they must have been one of many displaced families who wandered around Europe looking for help.[47]

One woman was luckier: according to Patorius Kurte, while the plundering was going on she dressed in her brother's clothes and hid in an empty wine barrel until she was discovered by a cavalryman. The cavalryman befriended her, and still in men's clothing she became his servant, attending his horses until his death three months later. At this point she was captured by the Swedish Army and served for five years as a musketeer, taking part in several duals until she was betrayed by a miller and so forced to give up her life as a soldier.

Twenty newspapers, 205 pamphlets and 41 illustrated broadsheets were published about the sack of Magdeburg in Germany in 1631 alone, some accusing Tilly of the destruction of the city, whilst others exonerated him. However, even the Protestant pamphlets admit that the population had several times refused terms of surrender, so according to the laws of war any town and city stormed by an army could be plundered by the victorious soldiers.[48]

However, if the survivors of the sack of Magdeburg thought their war was over, they were mistaken. On 3 June Tilly broke camp before Magdeburg and marched to Hesse, leaving a garrison within the city, which was quickly besieged by the Swedish Army; it was not until January 1632 that Pappenheim withdrew the garrison to reinforce his own army. In 1636 the city would again be besieged, this time by John George of Saxony's forces. During this time some of the city's former inhabitants began to return, among them Otto von Guericke who returned in February 1632. However, in 1639 only 450 households were charged with a tax to pay the garrison of 1,500 men.

In 1668 William Carr first published his book about his 16-year "grand tour", and recorded: "I had the curiosity to go from Lübeck to see the Ancient city of Magdeburg, but found it so ruined and decayed by the Swedish War, that I had no encouragement to stay there. I therefore hastened to Berlin."

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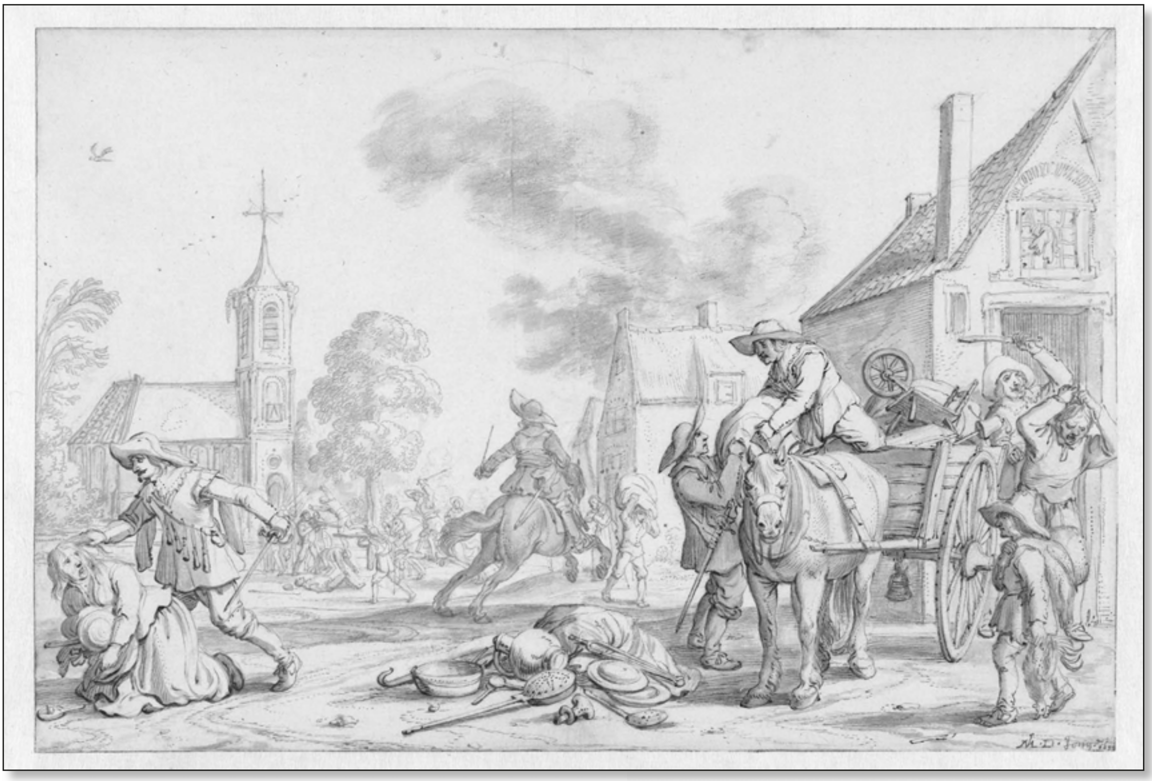
[47] TNA, SP 16/246 f.126, Petition of John Neesing, 24 September 1633; Report of the Lord Keeper, in John Fortescue et al. (eds), *Calendar of State Papers Colonial*, vol. 8, 1630–1634 (London: Her Majesty's Stationary Office, 1892) p.529.

[48] Parker, *The Thirty Years War*, p.112.



Soldiers plundering a village. Jan Martszen de Jonge, 1633. (Rijksmuseum)

Unfortunately he did not say when he visited Magdeburg, but since he dedicated it to King William III he may have left Britain about the time of the Restoration in 1660.[49]

Unfortunately, despite the outcry, the destruction of Magdeburg changed nothing and the civilian population would go on suffering from the soldiers' brutality. When Tilly was defeated at the battle of Breitenfeld and at the Lech, the Swedish Army invaded Bavaria itself. Although Wallenstein had quartered his soldiers on Maximilian's territory, which had brought strong complaints to Ferdinand II, for 15 years the people of Bavaria had been spared the horrors of war within its borders. This changed on 16 April when Gustavus Adolphus crossed the Bavarian border and advanced on Donauwörth, which quickly fell to him, and on 24 April the Bavarian garrison of Augsburg surrendered to him. After attempting to capture Ingolstadt, which was too strongly fortified and garrisoned by the remnants of Tilly's army, Gustavus marched on Munich, which he entered on 17 May. Among his entourage was Frederick V, which must have been a further blow to Maximilian. On 9 June 1632 the Protestant pamphlet *The Continuation of Our Forraign News* reported that the Duke of Bavaria had "cowardly fled his country", and that the inhabitants of Bavaria, found "so much favour at the hands of so great and gracious a conqueror as the King of Sweden,

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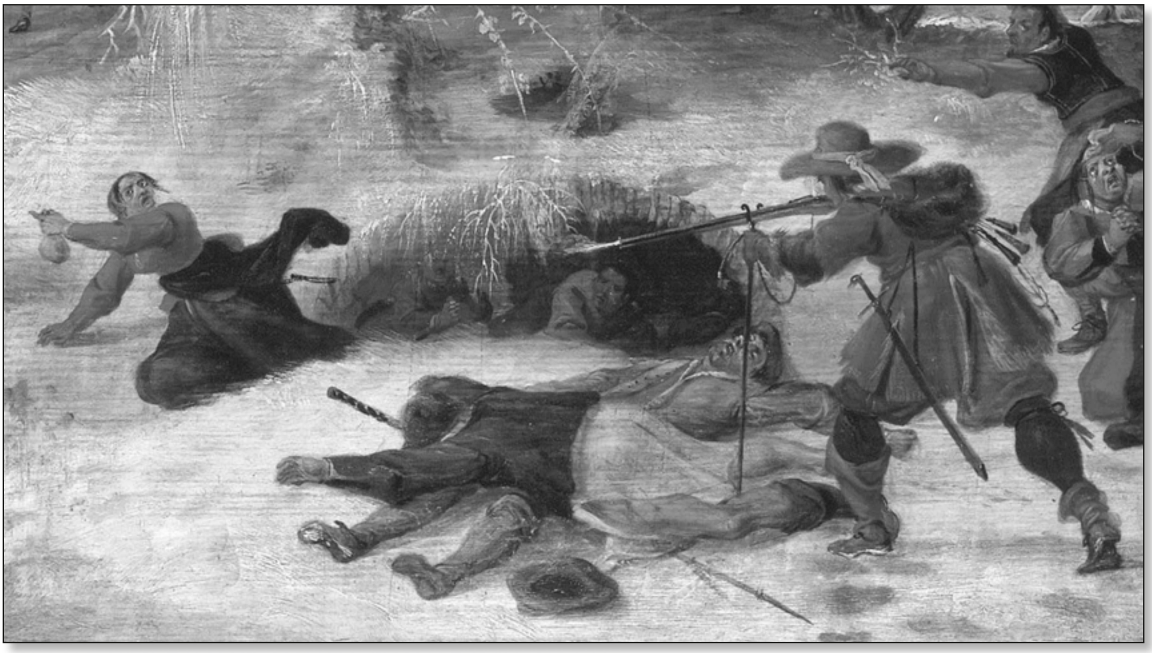
[49] Hoffman, vol. 2, p.270; William Carr, *The Travellours guide, and historians faithful companion* (London: 1695).



Soldiers pillaging a village. Pieter Snayers. (Michał Paradowski's archive)

all people show great joy and to profess they will do anything for him". In reality Gustavus Adolphus had ordered his army to devastate the country and demanded 400,000 rixdollars.[50]

Munich itself was spared the worst excesses of Swedish brutality, since Gustavus had ordered the majority of his army to remain outside the city, except for Sir John Hepburn's Brigade which was to act as garrison. This is not to say that the inhabitants did not live in fear: a chronicler records that the citizens were, "often warned that the city would suffer the dire fate of Magdeburg" if they did not pay their contribution money. The chronicle continues:

> Whatever the soldiers bought in the way of beer, bread, etc., they conscientiously paid for. They twice moved camp from the meadows of Schwabing to those in front of the Neuhauser Gate, which was burnt down after their departure. But neither pillows nor bolsters nor any other articles of bedding were left in the city. Often victuals had to be carried out to the camp. A number of Swedish sutlers carried out the March ale casked by the farmers and sold it to the soldiers …
>
> In the daytime the Swedish soldiers brought all manner of things into the city and sold them, large numbers of oxen, many horses, many more pigs, women's veils, all sorts of linen, flax and yarn, oats, tin plates and jugs, a great number of copper saucepans, stolen goblets, wax tapers and many other things for use in the kitchen; they even brought the iron hoops from cart wheels, they brought whole carts, locks taken from doors, coats, women's skirts; all of which things were bought up by the inhabitants of this city at an extremely low price. In those days you could buy an ox for a gulden and pay the same for a pound of dripping.[51]

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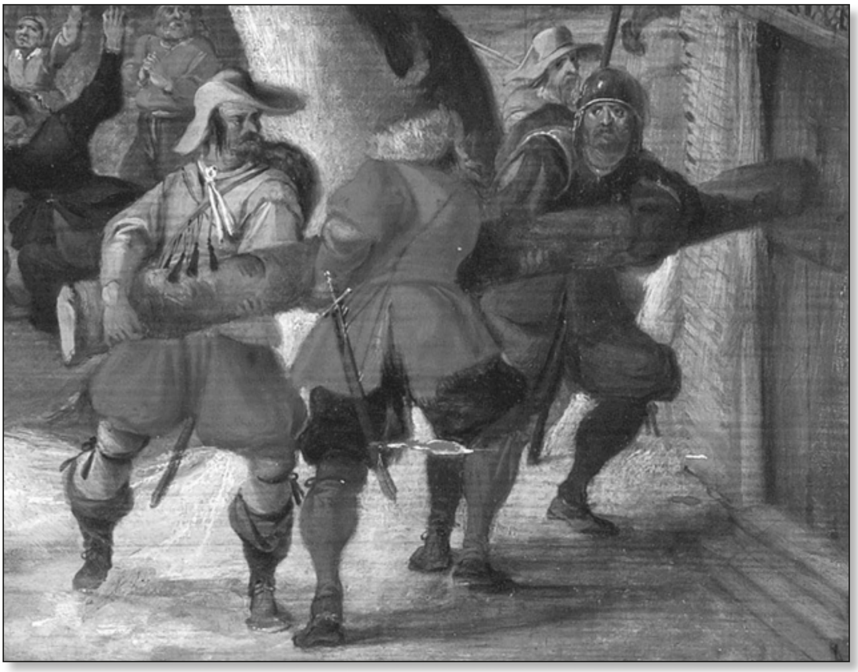
[50] BL, LR 263/C6/19, *The Continuation of Forraign News*.

[51] Chronicle quoted in Burckhardt, vol. 2, p.395.



Soldiers using a makeshift ram to break into a house. Pieter Snayers. (Michał Paradowski's archive)

Therefore the inhabitants of Munich, who still had money, could obtain some very good bargains from the soldiers, whereas the soldiers might only receive a tenth of the value of their plunder that they did at Magdeburg.

The chronicler continued: "And so we have lain for three whole weeks under the enemy's yoke and bondage. May Almighty God grant that we may find joy to compensate for this great harm we have suffered, and may he gladden our hearts with an enduring peace, and protect us as a father from such ravages of war." [52]

Munich was lucky that it was occupied for just three weeks; other towns and villages were not so fortunate and for the next three years would be occupied by soldiers of one side or the other. In 1632 the Swedish would occupy Landsburg, Regensburg, Moosburg and Freysing, and Maximilian's brother Albert with his wife and children along with Maximilian's wife fled to Salzburg. Maximilian believed that God had forsaken him, and the *Swedish Intelligencer* recorded sarcastically that he was "much troubled with sore eyes caused by smoke of his own country".[53]

About 29 miles west of Munich is the town of Erling, with the nearby monastery of Ansbach, where Father Maurius Friesenegger lived. He recorded in his diary that the Swedish all the time "devastate, burning and killing … every night in the distance four, five and even more" villages could be seen burning. The inhabitants sought shelter in the forests whenever the Swedish occupied the town, after two of its inhabitants had been killed. On one occasion when the townsfolk returned they found their church was "full of stench and horse manure … all the donation boxes broken, [as well as] the tomb of the founder. However, the altars and the images were all undamaged, except for the portrait of St Rasso." In the monastery they found "a horrible devastation, no door, no lock, no box, no closet, no window, which was not broken". Only one bed was found to be unbroken and to make matters worse the Swedish and their horses had defecated in the rooms and corridors. "More miserable than the monastery", Maurius Friesenegger continues, was the village: "The upper inn, the beautiful Richter House, the new school building, in all 43 houses, almost the whole upper village lay in ashes … [There were] no wagons, no ploughs throughout the village. From 140 horses were only three left, of 400 head of cattle only four, sheep, pigs and the whole poultry was lost entirely."

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[52] Chronicle quoted in Burckhardt, vol. 2, p.397.

[53] Watts, *The Swedish Intelligencer*, part 1, pp.167–168.

This was the choice of the civilian in lands occupied by foreign, and sometimes friendly, forces: did they they flee to the forest to save themselves, knowing their home might be plundered or destroyed by the soldiery; or did they remain to protect their possessions knowing they might be beaten by the soldiers or even killed?[54]

There was a third choice: to fight back as people in other states had done, and the Bavarian population are known to have waged a guerrilla war on the occupiers; but this could lead to reprisals. One newspaper recalls that the priests and Archduke Leopold encouraged the Bavarian peasants:

> [To] give no quarter to any Swedish soldiers but either kill them in [a] cruel and scornful manner or cut … off [their] ears, noses and hands. To some they pull out their eyes and their tongues … the Swedish troops began likewise to forget their wonted moderation and use their enemies in like manner, so that in one day there were seen 200 fires, so many villages and small towns being laid in ashes.[55]

It was even said that Maximilian had armed his subjects for this purpose. However, this widespread looting did not bring any riches to the soldiers themselves, as one soldier with the Swedish army records:

> We do daily obtain great store of booty, but we cannot sell them, for they will yield us but little money or none at all, a good fair horse may be bought for four Rixdollars, a cow for own [*sic*] florins, and a hog for a very small value, poultry and geese and the like bare no price, bedding, linen, cloth, copper-work and pewter is of no estimation at all neither any manner of household stuff. Money is that which is here looked after. And in the Palatinate they are in the very same case.[56]

Fortunately for the people of Bavaria, Gustavus needed to seek out and destroy the armies of Bavaria and Wallenstein. Leaving strong garrisons in Nördlingen and Augsburg, he led the Swedish Army into Saxony and was killed at the battle of Lützen on 17 November 1632. In early December a

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[54] Maurus Friesenegger, *Tagebuch aus dem 30jahrigen Kreig* (Munich: Allitera, 2007), pp.16–18.

[55] TNA, SP 101/30, ff.211, 228, 230, *Advise from several places in Germany*, May 1632.

[56] *The Continuation of our Forrain Avisoes*, no. 20, 28 April 1632 (London: Nathan Butter and Nicholas Bourne), p.6.

Bavarian Army drove the remnants of the Swedish Army out of most of Bavaria. Father Maurus Friesenegger recalls that, "the beginning of this year, [1633] we lived a little quieter, but always in fear because the Swedes in Augsburg and other Imperial cities; [at] Erling there was nothing in the houses but misery, half of the houses lay in ashes, the others had no roofs."[57]

Efforts were made to send food from Munich and from other towns to feed the populace, but too few provisions came to satisfy all their hunger, which implies that not all of Bavaria was as badly affected as Friesenegger's village. On 19 April 1633 Landsberg surrendered to the Swedish, who burned the city gates and plundered the city. On 9 July news was brought to the village of Erling that the Swedish were in the neighbourhood, which made the villagers prepare to flee, but the Swedish retired to Landsberg again. "Woe to the future", records Friesenegger in September 1633, "many fields were already barren … What bitter prospect for extreme hunger!" [58]

Unfortunately for Erling and the surrounding villages, what the Swedish had started, the Croats – who were meant to stop the Swedish raiding parties while the main Bavarian Army was away – continued, inasmuch that Friesenegger declared that "the Croats were more hated than the Swedish because of their thieving". Then, "on 30 September [1633] another troop of 1,000 Spanish cavalry passed through. Although as new recruits they understood no military discipline, they did understand blackmail and robbery, whereat the inhabitants once more left their houses and homes and fled into the woods."

If this were not enough the Spanish had brought plague with them, which killed about a tenth of the population of Deggendorf. Some inhabitants managed to bury their valuables before the soldiers arrived: a hoard of 3,829 coins was found in 1986 dating from this time. Whether their owner succumbed to the brutality of the soldiers or caught the plague is not known.[59]

Meanwhile the Swedish garrison of Augsburg continued its raids into Bavaria. At the beginning of October Friesenegger again wrote, "In the night one could see first two, then six fearful fires burning in the Lechrain towards Augsburg … from which it was concluded that the Swedes from Augsburg were laying waste [to] everything as they thought there were no more soldiers to resist them." This party was ambushed on their way back to Augsburg, but in vengeance the garrison "burnt down 140 houses in the parish of Prittriching; in Bergen all but two small houses; 40 in Mering; nine in Kissing and an unknown number of thatches and houses." The diocese within this area of Bavaria had to issue tin vessels and chalices to its churches to replace the silver ones that had been plundered, but "there was often a shortage of wine, wafers and other necessities so that the Mass had to be cancelled, especially as the parish clergy often had no supplies and not even enough black bread to eat".[60]

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[57] Friesenegger, p.24.

[58] Friesenegger, p.40.

[59] Friesenegger, p.31.

[60] Friesenegger, p.32.

Unfortunately winter brought no respite for these Bavarian villages, and throughout December enemy raids continued. To keep warm the villagers sought sanctuary in Friesenegger's monastery, which they barricaded themselves in to. They set up their own *Salva Guardia* to protect them, but they were no match for the veteran soldiers. Neither were the Spanish soldiers any better, and with the inhabitants sheltering in the monastery, Friesenegger records in his diary for 21 December:

> The village, where the [Spanish] soldiers found only empty houses and no people, became a terrible sight. The whole village seemed to be aflame. They took chairs and benches out of the houses, removed roofs, filling the streets with dangerous camp fires and the whole village echoes to their shouts and screams that could only have been brought on by hunger and despair. Not a single villager who looked on from afar had any hope of seeing his house again when the next day dawned. [61]

The following day he adds, "these monsters burnt down the beautiful castle of Muhlfeld". The villagers could not wait until 23 December when they had been told the Spanish would leave, but they were disappointed when the 23rd came and went and still the soldiers remained. It would not be until 17 January 1634 that the soldiers finally marched away, their commander taking five cows with him. By now:

> Soldiers and peasants were now to be seen half clothed and pale with misery, emaciated with hunger and walking about with bare feet in the great cold. What would happen in the long term? The soldiers were eating dogs, cats and any stolen meat. For days on end the peasants had not even a crust of bread. Many searched our monastery gardens for greens, winter lettuce, roots and herbs, which they ate raw or stewed.[62]

Worse still they ate their seed crop for the following year, so they would have to buy in more seed if there was to be a harvest in 1634. One villager who had died of starvation was found to have gnawed at her fingers. Wagons carrying bread continued to arrive from Munich but still there was not enough food, and by now there were 1,000 people sheltering in the monastery, "all rooms were crammed, one leaning against the other … Imagine", Friesenegger continues, "the misery, the cries of children, the wailing of the parents, the hunger, the stench!" [63]

With the soldiers now gone they could return to their village, but they found it in ruins, the soldiers having burnt anything combustible for firewood. In all the occupation of the Spanish had cost them 9,072 fl 34 kr, but their ordeal was not over: Burgundian soldiers soon arrived who would cost them a further 1,008 fl 30 kr.[64]

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[61] Friesenegger, p.35.

[62] Friesenegger, pp.36–37.

[63] Friesenegger, p.43.

[64] Friesenegger, p.51.

Another Bavarian pastor, Johann Renner, records that between 1632 and 1634 the village of Vach had been raided 61 times; in the parish register for Eldersdorf, about 10 miles north of Nuremberg, is recorded in 1632 the burial of Hans Gursing, who was "formerly a shepherd, who was ridden down by a cavalryman and died from his injuries". Recorded too, the death of Georg Reusch, "who received two shot wounds three weeks before during the plundering by Forchheim soldiers, died in the hospital at Nuremberg and the following day 29 May [1634], he was taken out and buried." Which side these soldiers were on is not recorded, except for in one entry for 1631 which records the demise of "Margareta, Hans Stuber's wife, who was terrirized and beaten by soldiers from Tilly's army."[65]

It was not just villages that were affected. In April 1633 Eichstätt had been captured by Swedish troops, who in return for not plundering the city demanded a substantial ransom. In October 1633 the Swedish were expelled, but wanting vengeance they set fire to the city, burning 444 houses, seven churches and two cloisters. They also destroyed the city's famous garden.[66]

In 1632 both Nördlingen and Augsburg had been captured by the Swedish after a short siege, but shortly after Gustavus' departure they were besieged by Bavarian and Imperialist forces, although they were not strong enough to completely blockade the cities. Nevertheless, between 1627 and 1640 Nördlingen's population fell by 793 households or nearly half its households, mainly between 1633 and 1636, the largest drop being in 1634 when a larger besieging force was able to blockade the city more thoroughly. Coupled to this there was an outbreak of plague, of which one inhabitant said, "it was a blessing in these times to die of plague. Many might have been healed of this evil if they had taken steps against it at its onset, but they preferred to take on the sickness than to live such lives of punishment." The burial registers record a total of 1,549 burials for 1634, plus 343 non-residents or a total of 1,892, although not all were victims of the plague. This mortality rate should be compared to 601 the previous year or 200 in 1635.[67]

In January 1633 all non-residents of the city were ordered to leave, unless they were prepared to help with its fortifications. Soon it was reported that there was great hunger within the city and a pound of horsemeat cost three batzen, a pound of donkey meat, two batzen, and a calf 18 fl. These prices were too expensive for the poor within the city, who had no choice but to starve. It was said that the inhabitants consumed "horses, dogs and mice, and people with atrocities in the mouth fell dead in the street, (it is said that they ate even children and human flesh)." Even if they had meat there was no wood to cook it and anyone who ventured from the city to forage was attacked by the Croats.

It was during the siege of Nördlingen that the combined Swedish armies of Bernard of Saxe-Weimar and Marshal Horn were defeated by an

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[65] Quoted in Geoff Mortimer, 'The Thirty Years War in Eyewitness Personal Accounts', *German History* vol. 20, no.2 (2002), pp.149, 152.

[66] Joseph Schlecht, *Tagebuch Der Augustinernonne Klara Staiger* (Eichstätt, 1889), pp.90–91.

[67] Christopher R. Friedrichs, *Urban Society in an Age of War: Nördlingen, 1580–1720* (Princeton: Princeton University Press, 1979) pp.30, 306, 309.

Imperialist–Spanish Army on 7 September 1634. With no hope now of relief the city surrendered, and the garrison were able to march out with the full honours of war and given safe passage to Erfurt. Augsburg had surrendered shortly before. Nördlingen would change hands several more times and in December 1647 a Bavarian army would besiege it, which would destroy a further 98 houses and 43 other buildings.[68]

However, this scorched earth policy was having an effect on the Bavarian war effort: at the beginning of 1633 Erling was charged with a "prohibitive [high] tax on the farms", and when the Andechs Monastery was charged with supplying four horses for the Bavarian cavalry it could only supply "two very old and frail" ones because the better four had been stolen on the way to Munich.[69]

At the end of 1634 Maurus Friesenegger records that the Andechs monastery had just four cows and the village of Erling had five or six cows, but there were no sheep, pigs, geese or hens.[70] Six miles from Erling is the *schloss* of Seefeld, which records a similar picture:[71]

Types	1632 Census	1635 Census	Losses
Whole farms	78	29	-
Half farms	75	52	-
Salaried	342	200	-
People	2,915	979	1,936
Horses	2,915	146	690
Cattle	2,915	92	2,823
Pigs	1,346	6	1,340
Sheep	1,572	0	1,572
Geese	1,784	0	1,784
Chickens	1,897	58	1,839

To make matters worse there was a severe winter which caused the death of many half starved and naked villagers, with "many village communities which had previously counted 1,000 souls, [there were] now scarcely 20 or 30 left".[72]

The battle of Nördlingen and the surrender of Augsburg brought France into the war and ended the systematic destruction of Bavaria, since the seat of war moved to the Rhineland and Hesse-Kassel once more. However, the population of Bavaria still lived in fear of enemy raids, and in the neighbourhood of Andechs 200 villagers had died, buried in shallow graves, so that the survivors could still smell their decaying bodies. According to P. Vincent, "In the confines of Bavaria the living were nothing near able to bury the dead. But [that] the rats and mice devoured their carcasses [was] most horrible to behold."[73]

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[68] J.N. Hays *Epidemic and Pandemics: their impact on human history* (Santa Barbara, Calif.: ABCCLIO, 2005), p.98; Friedrichs, pp.31.

[69] Friesenegger, p.24.

[70] Friesenegger, p.56.

[71] Alex and Volker Buchner, *Bayern im Dreissigjährigen Krieg* (Dachau: Bayerland, 2002), p.79.

[72] Friesenegger, p.57.

But life had to go on. The people of Andechs rebuilt their houses and tried to sow their fields the best they could, but the cost of a farm horse was between 40 and 50 fl, a cow 20 to 30 fl, a calf 5–7 fl; wheat 25 fl; rye 14 fl and barley, 15 fl, which the villagers could not afford. On the other hand by August 1636 Erling could boast 47 horses and 26 cows and a November harvest produced a bumper crop. The following year 3,000 people made a pilgrimage to Andechs Monastery as a thanksgiving and since there were fewer labourers their wages increased from 8–10 fl to about 20–30 fl.[74]

As the situation in Bavaria improved, Maximilian was able to impose taxes once more depending on the size of a property. In 1643 each whole farm had to pay 2 fl, half farms 1 fl, the quarter farms probably had to pay 30 kr and eighth farms 15 kr, which in Erling raised 136 fl 52 kr, although Friesenegger added, "how gladly would everyone give the same again, if he had peace". Even so, the income was no where near that before the Swedish occupation, which was 31,779,253 fl from 1619–1634, but only 8,897,766 fl from 1635–1649 and Maximilian had to weaken his field army in order to garrison various towns in Bavaria which varied greatly in size. In 1637 the town of Heidelberg contained a garrison of 152 men, whilst Hassmersheim and Bretten had just one soldier each. However, the civilians' suffering would go on until the war was over, and most of the soldiers were disbanded.[75]

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[73] Vincent, p.61.

[74] Friesenegger, pp.58–59, 65.

[75] Friesenegger, p.76; Kasper, p.285; *The current to this week from Holland,* 29 May–8 June 1639; Franz Meier, *Die bayerische Unterpfalz im Dreißigjährigen Krieg: Besetzung, Verwaltung und Rekatholisierung der rechtsrheinischen Pfalz durch Bayern 1621 bis 1649* (Frankfurt am Main: P. Lang, *c.*1990), pp.340–341.

12

Life and Death in the Army

According to Monro, in seven years he travelled 6,385 km or on average about 1,198 km per year, either on foot or on board ships. Whereas Peter Hagendorf estimated that he had marched 22,500 km all over Europe or on average 900 km per year during his 25 years in the army. Usually an average day's march was between 15 and 20 km which sometimes could be a pleasurable experience during a summer's day. Robert Monro recalls that 'soldiers have not always [have had] so hard a life as the common opinion is, for sometimes as they have abundance so they have [a] variety of pleasures in marching softly without fear or danger, through fertile soils [land] and pleasant countries, their marches being more like a kingly progress than to wars.[1]

Hagendorf also describes the beautiful countryside and towns, and their inhabitants, and the good beer at Lippstadt, but "I saw seven [witches] … burned alive. Among them was even a pretty girl of 18, but she too was burned."[2] Although Hagendorf sometimes refers to bad times of a soldier's life, unfortunately he does not record the mundane aspects of life, such as what he did throughout the day and what he did for entertainment.

For many a life as a soldier was a family affair. In 1627 the Duke of Holstein's Regiment of Foot mustered 1,688 men, plus 897 women and in 1646 a Bavarian regiment of foot, which mustered 480 men also had 314 women, 74 servants and three sutlers, and a regiment of horse had 481 troopers, with 236 servants, 102 women and children and nine sutlers. They also had 1,072 horses between the regiment and 961 of these soldiers or 66 percent were veterans.[3]

According to Sir James Turner:

> Women are great helpers to armies, to their husbands, especially those of the lower condition … They provide, buy and dress their husband's meat, when their husbands are on duty or newly come from it; they bring in fuel for fire, a soldier's wife may be helpful to others, and gain money to her husband and herself; especially they are useful in camp and leaguers, being permitted (which

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[1] Monro, Part II, pp.7, 89 and unnumbered pages.

[2] Helfferich, p.282.

[3] <Kriegsbuch.blogspot.co.uk> (accessed December 2015); Redlich, pp.521–522.

> should not be refused them) to go some miles from the camp to buy victuals and other necessaries:[4]

Women who followed the army can be divided into three types: soldiers' wives, whores, who were unmarried but performed the same duties as a soldier's wife, and prostitutes. 'Whores' might attach themselves to a soldier for a campaign or two, although a late sixteenth-century German engraving called *The Mercenary's Whore* warned:

> If you're not into gluttony and boozing
> I don't want to follow you for long
> If I stay near you for any length of time
> I'll certainly let you have the French disease.[5]

Since the 'French disease', or syphilis, appeared in Europe in the late 1490s shortly after the discovery of America it is often said that it came from the New World, but there is no evidence for this. In theory, according to the Articles of War, prostitutes were to be whipped from the camp, but this requirement seems to have been largely ignored, even though they could also help spread syphilis throughout the army. Among the regimental staff was a *Hurenwebel* (whoremaster), whose job it was to control these women.

There was a hierarchy among the women: a sergeant's wife was higher than a musketeer's, but a musketeer's wife was higher than a musketeer's whore, who in turn were higher than a prostitute. The woman's status in camp society would also depend on whether she sat in a baggage wagon or walked. On the other hand if she tried to rise above her place this could lead to disorder between her partner and those of other women, who often became embroiled in the quarrel. If she became a widow a soldier's wife would have to quickly find herself another husband to survive the rigours of campaign and not slide down the pecking order of camp society. No doubt these widows were in great demand from the unmarried soldiers.[6]

On one occasion Father Drexel observed that a woman, "was carrying a young child on her head, but her hands were not empty of burdens. It is incredible how great a burden one such female soldier would carry, her back, head, both hands loaded and her legs strung with bundles. I saw another who carried a musket, just like a man as she made her way."[7]

On 2 September 1620 Drexel records, "today I baptised two children of the soldiers", and four days later he baptised a further six children all from women accompanying Colonel Haslang's Regiment of Foot. According to Hans Kirchhof's *Miliaris Disciplina*, which was published in 1602, these baptisms were an excuse to celebrate:

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[4] Turner, p.277.

[5] Quoted in Keith Moxey, *Peasants, Warriors and Wives: popular imagery in the Reformation* (University of Chicago Press, 2004), p.81.

[6] John Lynn, *Women, Armies and Warfare in Early Modern Europe* (Cambridge: Cambridge University Press, 2008), p.67.

[7] Drexel, pp.156–158, 170.

> If a woman in camp has a child, the child's father takes as many Godparents as he likes. If the regiment lies in a city, a small town or else nearby, they bear the little child into the church themselves and the preacher who belongs to the camp baptises it. But if there is none available you need to get the pastor of the city. If the church is somewhat far away from the camp, however and it is not easy or safe to reach it happens in camp. And when the baptism is done the city or in camp a landsknecht's woman … covers it, if nothing else seems to be available with a clean cloth.
>
> Other godmothers and women follow the child next. After that the godfathers, the men and other requisite soldiers. They need at least one piper and a drummer to go before them to the baptism and back again. After the baptism people send the mother a gold crown or a thaler from each of the Godparents. After that, if there's time and enough space in the camp, people sit together … [and] have a good little drink.[8]

When Hagendorf had his daughter, Anna Maria, baptised on 5 January 1648 her godparents were the regimental provost marshal, Christoph Issel, the army doctor Melchert Bords and Benengel Hessin, the wife of his captain. His daughter was named after his second wife, the "highly virtuous Anna Maria Buchlerin, the daughter of Martin Buchler". He had married her on 23 January 1635 while his regiment was wintering in Pforzheim, which is near the Black Forest in Baden Württemberg. He records that the wedding cost him 45 gulden, although her father paid 10 gulden towards it. She also seems to have followed the army with her parents, because at Écourt St Quentin, where his regiment was quartered, Hagendorf records that his mother-in-law died of plague on 30 September 1636. His first wife, Anne Stadlerin of Traunstein in Lower Bavaria, whom he had married when he first joined Pappenheim's Regiment and who had nursed him back to health after he was wounded storming the city of Magdeburg, died in 1633 in childbirth, along with their baby. Their other three children died early in childhood.[9] Many boys of soldiers could expect to end up soldiers themselves having known no other life, likewise the girls may have ended up as soldiers' wives.

However, sometimes the women could be a detriment to military discipline. In August 1633 part of the garrison of Erfurt was ordered to dig some fortifications, but "Their women began to wonder where their men had gone and they went looking for them. They brought food and drink with them. Once they had begun to settle in, little work was done afterwards. More pints of beer and wine were drunk than carts of earth moved."[10]

If their army was defeated then the women might be caught up in the pursuit that followed, but there were other dangers: for example in 1644 Colonel Johann von Sporck, who commanded a regiment of harquebusiers in the Bavarian Army quartered then at Schwabisch Hall, put several soldiers'

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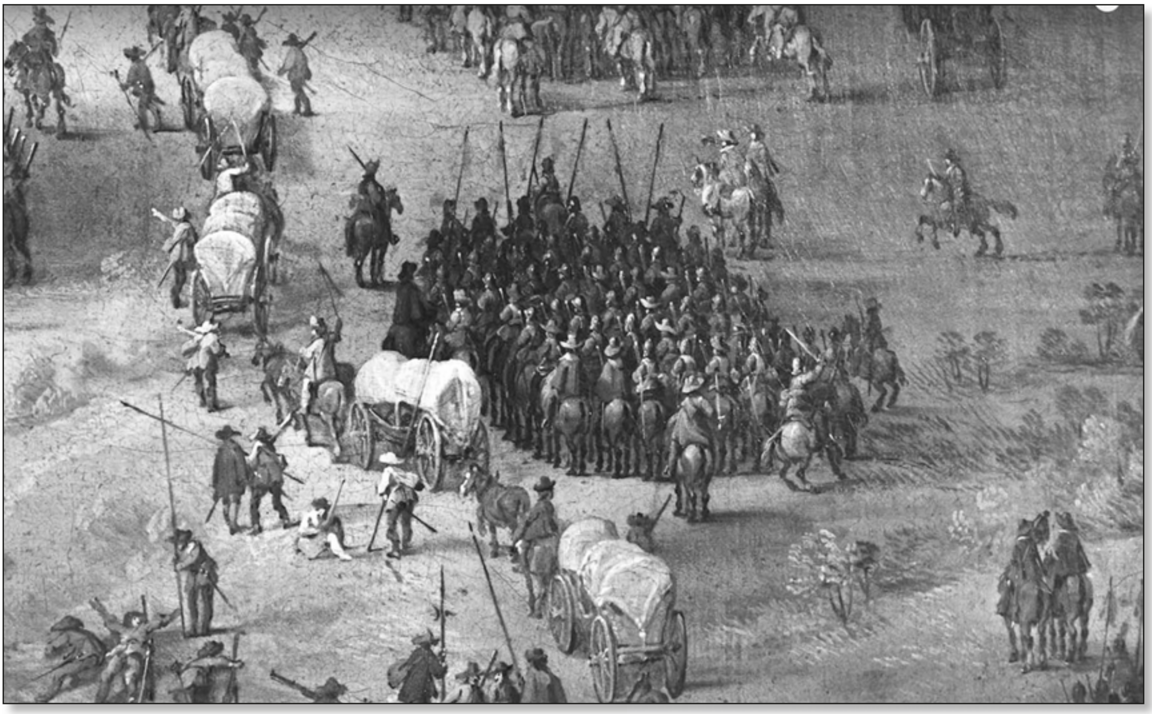
[8] Quoted in Staiano-Daniels, p.214.

[9] Helfferich, pp.286, 290, 293, 301.

[10] Quoted in Holger Berg, *Military Occupation under the Eyes of the Lord : Studies in Erfurt During the Thirty Years War* (Göttingen: Vandenhoeck & Ruprecht, 2010), p.58.



An army on the march. Pieter Snayers. (Michał Paradowski's archive)

wives on trial for witchcraft when several horses of his regiment died in suspicious circumstances. These women were found guilty and burned.[11]

On 5 June 1629, among the 47 prisoners "condemned of felonies" from Newgate and Bridewell gaols, there was an Elizabeth Leech who was ordered to be delivered to the Swedish Ambassador for service in Gustavus Adolphus' army. What Elizabeth's role was intended to be is not specified. In 1634 a doctor of Hildesheim discovered a woman who had been wounded in a skirmish dressed as a musketeer; she may have belonged to Colonel Sorbus Ordre's Regiment, which belonged to the Swedish Army and was quartered in the town from 10 April 1634. This is one of a very few examples of women serving in the ranks other than camp followers.[12]

However, not all soldiers' wives accompanied their husbands on campaign; although on rare occasions soldiers might be granted leave, they might receive letters from their loved ones, for example Hans Cautzner, of Witzenhausen in Hesse. His wife probably had someone write to him on her behalf, as she said: "Your letter I received and had read to me … remember that you said to me that you would come back to me again as soon as you could take leave. So don't stay away too long." She goes on to say that she is lonely and also that their son has the pox, adding "all your good friends send their greetings".[13]

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[11] K. Bussmann & Heinz Schilling (ed.), *1648, War and Peace in Europe* (München: Westfälisches Landesmuseum für Kunst und Kulturgeschichte, 1999), p.127; Weber, pp.406–407.

[12] John Bruce (ed.), *Calendar of State Papers Domestic Series, Charles I, 1628–1629* (London: Longman, 1859), p.568; Casper von Schoch, <www.30jaehrigerkreig.de> (accessed December 2015) note 5; Jordan Reinhard, *Chronik der Stadt Mühlhausen im Thüringen* (Mühlhausen: Danner, 1906), vol.3, p.78.

Whether Barbara Cautzner would ever see her "dearest husband" again is unknown. A soldier's life was full of dangers not just from battles, there was always the danger of being attacked by the local population in reprisal for atrocities committed by other soldiers. On one occasion Hagendorf records that he was suffering from a hangover and so straggled from his regiment and was attacked by three peasants who robbed him of everything including his coat.

Many soldiers probably never fought in a large-scale battle, but there were countless skirmishes where there was always the possibility of being killed or maimed. On 8 September 1634, two days after the battle of Nördlingen, a muster was held of the Bavarian infantry regiments which had been at the battle:[14]

Regiment of Foot	**No. men**	**No. sick and wounded**	**No. killed**
Fugger	1,035	86	285
Reinach	1,133	109	246
Salis	50?	?	250
Ruepp	1,132	150	35
Alt Pappenheim	1,019	172	153
Puck	483	73	426
Hardenburg	725	74	99
Total	5,577	664	1,494

The regiments of Hardenburg and Ruepp had been placed in reserve on the left wing, whereas Fugger's Regiment was in the front line. The other regiments were on the right wing. By these figures for Pappenheim's Regiment Hagendorf appears to be exaggerating when he writes about the battle, "This time the Almighty protected me especially, so that I had to thank the dear Lord greatly for all the days of my life that I had walked away without a scratch, despite the fact that not one other man out of all out of all those who returned to the regiment did so without injury."[15]

However, a soldier was more likely to succumb to disease rather than injuries received in battle; in 1637 General Johann von Werth warned Maximilian that his men were so exhausted that a quarter were sick or were straggling from their line of march and that the regiments would be ruined before they had made contact with the enemy. Moreover he had to pay his "poor starving men" himself, who had gone 10 to 12 days without bread and

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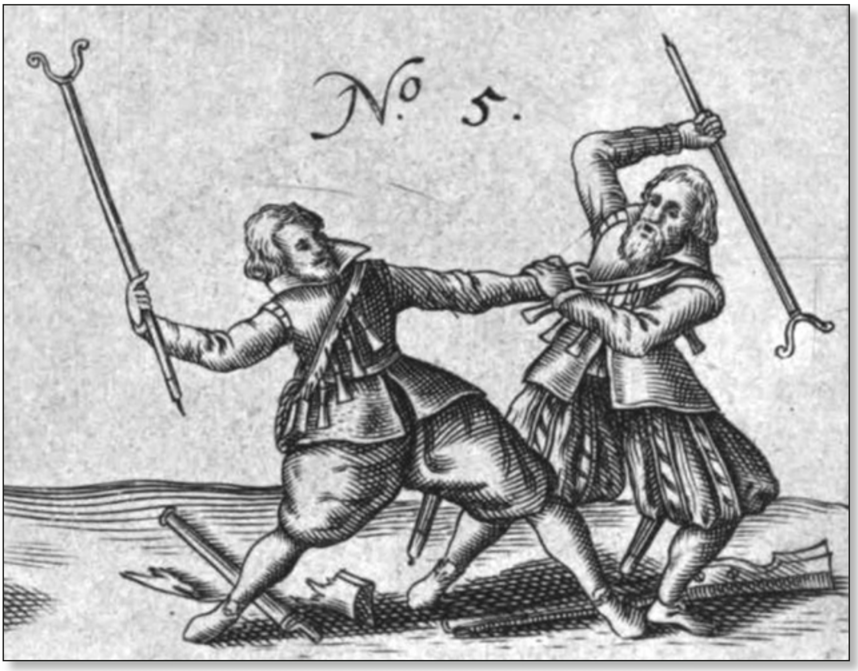
[13] Medick and Marschke, p.93.

[14] Heilmann, vol. I, p.495; Peter Engerisser and Pavel Hrnčiřík, *Nördlingen 1634: Die Schlacht bei Nördlingen – Wendepunkt des Dreißigjährigen Krieges* (Weissenstadt: H. Späthling, 2009), pp.280, Karl Jacob, *Von Lützen nach Nördlingen: Ein Beitrag zur Geschichte des Dreissigjährigen Kriegs in Süddeutschland in den Jahren 1633 und 1634* (Strassburg i.E: Ed. van Hauten, 1904) part II, p.108.

[15] Helfferich, p.289.



Hand-to-hand combat between two musketeers. Johann Jacobi von Wallhausen, *Ritterkunst,* 1616. (Michał Paradowski's archive)

were living on horseflesh.[16] It was said that the Croats' lifestyle was such that, "few [are] likely to get grey hairs". A soldier who died on campaign would usually be buried in an unmarked mass grave which history would forget, unless accidentally discovered centuries later. One of these mass graves was found in 1974 on the battlefield of White Mountain near Prague. It contained 44 skeletons, of which 40 can be positively identified as men and two as women. One is estimated as being just 15 years old, three were about 20, 17 were between the ages of 20 and 40, 15 between 40 and 50 and four were approximately 60. Of the women one was between 20 and 30 years old and the other was 40 to 50.[17]

Another mass grave was discovered in 2007 on the battlefield of Wittstock and contained 125 skeletal remains, although there were only 88 complete skeletons. In 2010 three pits were found at Stralsund containing a total of 25 skeletons, although the majority appear to have died from disease with only a few having signs of battle injuries. Only in one of the three pits can archaeologists say for certain that those buried were soldiers. They were buried where they fell, possibly when part of the fortification of the town collapsed. In this grave was also found six pikes, three muskets and three swords. The latest grave was discovered in 2011 on the battlefield of Lützen and contained the skeletal remains of 47 soldiers who are believed to have fought with the Blue Regiment of the Swedish Army.[18]

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[16] Redlich, p.513; Drexel, pp.147–149.

[17] TNA, SP 101/2; Vaclav Matousek 'Archaeological Erforschung der Schlachtfelder des Dreissigsjährigen Krieges', in Janos Stekovics, *Die Blut'ge Affair bei Lützen: Wallensteins Wende* (Wettin-Löbejün: Stekovics, 2012), p.283.

[18] Don McNair, *The Struggle for Stralsund, 1627–1630* (Farnham: Pike and Shot Society, 2012), p.45.

Some skeletons in these graves bore signs of more peaceful pursuits, such as smoking, a pastime said to have been introduced by the English; the English general, Sir Charles Morgan, went so far to say that smoking and cards kept his men happy. However, by always smoking a clay pipe in the same position in their mouths they had worn away part of their front teeth, forming a round groove.

In the "Lützen grave" the soldiers were aged between 16 and 45 when they were killed, although the majority were 21 to 35 years old; of those in the Wittstock grave the youngest was about 18, although the average age was 28. The tallest was about 1.82 metres (5 feet 11 inches), although the average height was 1.70 metres (5 feet 7 inches). Eleven are known to have come from Scotland and a further 33 were possibly Scottish, although the tests were inconclusive, while the remainder came from central Europe or Sweden.[19]

It was found that three quarters of the Wittstock grave occupants had suffered from malnutrition during childhood, which had led to rickets or scurvy due to a lack of vitamin C, while a large proportion had osteoarthritis in the hips and knee joints and over half had tooth decay. Many were missing teeth as well as suffering from inflammation of the maxillary sinuses or oral mucosa. In some there were also signs of syphilis, tuberculosis or periosteal inflammation, or they were infested with lice or other parasites.

Twenty of the 80 skeletons examined from the Wittstock grave had on average two slash marks to their skulls, some even more. Due to where the cut marks were on the skull it is believed that they met their death either from a blow from a pole weapon, such as a halberd, or had been attacked by cavalry armed with swords. One soldier who by his DNA is believed to have been a 17- to 20-year-old Finn had five slashes to his head, although only one of these blows is believed to have been the fatal one.

A further 24 skeletons had lead shot among their bones either in the pelvic area or in the area of the right shoulder, and a further five were shot in the knee region, while some skeletons bore signs of having been attacked from behind and several had signs of stab wounds, for example a chip out of the rib bone or a hole in their vertebrae probably made by a sword blade.[20]

Although the Lützen grave was smaller, those buried showed similar wounds to the Wittstock burials with the majority having head wounds; twenty-one had been shot in the head, with 11 having the ball still in the skull. Test results on the teeth show that they were mainly Germans – the majority of the Blue Regiment was German – but one man was Swedish: could he have been Erich Sirerson, who is one of the few Swedish soldiers mentioned in the muster rolls of the regiment? The skeletons also had signs of disease, such as syphilis, and a vitamin D deficiency. The height of these soldiers was on average between 1.65 to 1.80 metres (5 feet 5 inches to 5 feet 11 inches) and some had signs of having badly healed broken bones. Several skeletons from these graves had marks to their forearms where they had desperately tried to deflect a sword slash by holding up their arm for protection.

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[19] Sabine Eickhoff et al. *1636: Ihre Letzte Schlacht: Leben im Dreissigjährigen Krieg* (Brandenburg: Archaeologisches Landesmuseum, 2013), p.178); Sabine Eickhoff, 'Das Massengrab der Schlacht von Wittstock', in *Militargeschichte*, February 2013, p.49.

[20] Eickhoff et al., pp.152–163: Eickhoff, 'Das Massengrab der Schlacht von Wittstock', p.49.

A sixteenth-century writer estimated that for every soldier killed by a firearm a further four were wounded; although this ratio was dismissed by Sir John Smythe, he does not give his own figure for casualties caused by firearms. However, a casualty return for 16 July 1621 shows the following:[21]

Infantry regiment	**Dead**	**Wounded**	**Killed in Action**
Anholt	10	21	20
Bauer	15	32	18
Herliberg	3	12	2
Florinville	4	12	4
Schmidt	8	64	51 (incl. 12 missing)
Rouville	9	30	3
Mortaigne	3	4	4
Gaisberg	-	-	-

Moreover at the battle of Breitenfeld, Tilly is said to have lost about two thirds of his infantry and half his cavalry, while on paper Geleen's Regiment of Foot is said to have mustered 2,000 men before the battle, but only 400 remained that evening. Likewise at the battle of Wittstock only 30 men of Wendt's Regiment of Foot were with the colours after the battle.

At the battle of Nördlingen the Bavarian Army suffered the following casualties:[22]

Regiment	**Strength**	**Sick and Wounded**	**Prisoners**
Fugger	1,234	86	285
Reinach	1,270	109	246
Pappenheim	1,000	172	153
Ruepp	6,357	664	1,494
Puck	836	73	426
Harttenberg	750	74	99
Salis	250	-	250
Total	6,357	664	1,494

Unlike today a seventeenth-century surgeon would usually treat his patients in the sitting position, rather than lying down, because this was seen as the position of a corpse. In his bag or chest the surgeon would have razors, trepans, head saws, dismembering saws, nippers, cauterising irons and even a hammer and chisel. His tools for the extraction of teeth would include forceps and a small file. The surgeon would also have various potions which he could use, which were divided into "Aqua [water], oils, syrups and Opiats" and such "purging" medicines. Despite the unhygienic conditions soldiers did survive surgery. During the storming of Magdeburg on 21 May 1631 Peter Hagendorf was wounded, and records:

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[21] BL, Harl MS 135 f.50; Heilmann, Part I, p.102.

[22] Jacob, p.108.

> I was taken to the camp and bound up. For I had been shot once through the stomach (shot right through from the front) and a second time through both shoulders, as that bullet was caught in my shirt. The army doctor bound my hands behind my back so he could use the gouge (forceps) on me.

Without using anaesthetic or sterilising his instrument, the surgeon would try to remove the ball with a pair of "stork bill" forceps, which made it easier to grab the ball. If he failed to remove all the debris from the wound, such as cloth or fragments of bone, then the patient would develop an infection. Even worse the surgeon might grip a piece of flesh with the forceps while trying to remove the ball, so putting his patient through even more agony. It is little wonder then that Hagendorf at this stage of his surgery seems to have passed out, because he continues, "thus I was brought back to my hut half dead". On 24 May he was taken to Halberstadt, where 300 men from Pappenheim's Regiment were lodged in nearby villages to recover. It would take him seven weeks to be fit enough to rejoin his regiment.[23]

Some progressive surgeons put forward the idea that wounds should be bandaged, but in the heat of battle where operations had to be performed quickly cauterising was seen as the only solution, even though it brought "terror" to the patient who saw the red hot iron in front of him; several men would have to hold him down while the iron was applied to his flesh.

However, it was not just the ordinary soldiers who risked their lives. At Breitenfeld Tilly received two or three wounds from musket balls and pistol shots and a bruise on the neck from the butt of a carbine. He was also captured, but rescued by Rudolf, Duke of Saxe-Lauenburg. Pappenheim is also said to have been wounded six or seven times during the battle, before being killed at the battle of Lützen a year later. Officers like Tilly and Pappenheim would probably have brought their own doctors on campaign, who were better qualified in their profession than the ordinary regimental or company surgeons.[24]

Disease would reduce a regiment's strength even more drastically than a battle. On 8 October 1620 Father Fitzsimons records in his diary, "The most serene Duke of Bavaria, made up his mind to go home. His army and nearly [all of] his whole staff got sick. All his councillors, secretaries, courtiers, and servants had been torn from him by death or disease." The Duke would rejoin the army just before the battle of White Mountain.[25]

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[23] Quoted in Helfferich, p.283. The Germa words for 'tent' and 'hut' at this time are interchangeable so I have used the word 'hut' instead.

[24] Harte, part II, p.40.

[25] Fitzsimon, p.89.

There are countless references to diseases spreading through one army or another throughout the war. When several regiments of foot were mustered between 17 and 28 November 1620, although on paper each mustered 3,000 men, it was found that there were 1,042 healthy soldiers in Haslang's regiment but an additional 94 were sick, and similar can be said of Sulz's, Marcossay's and Rouville's Regiments which had 704 healthy and 88 sick soldiers, 1,014 healthy and 110 sick and 826 healthy and 124 sick soldiers respectively.[26] Nothing had changed by September 1622 when Tilly was said to be at Heidelberg with "above 6,000 fighting men for there is great sickness in his army and no less want of victuals", and on 22 December 1631 it was claimed that Tilly "hath brave cavalry but very poor and impotent foot forces. In their march from Ansbach to Guntsbach they left behind them in the streets and ways above 1,500 sick and dead soldiers."[27]

The early seventeenth century was a time when germs and bacteria were unknown, and it was believed that diseases were spread by bad smells. These smells upset the 'humours' of the body. Doctors believed that the body contained four "humours": blood, phlegm, yellow bile and black bile, so if a patient was ill then one of these "humours" was unbalanced and the balance must be restored through various medicines or bleeding (which could take the form of cutting) or leeches. It is easy to look upon surgeons at this time as quacks, but this idea had been accepted from ancient times.

The destruction of armies from disease is usually blamed on typhus, which in the seventeenth century had many names, such as the "burning ague", "the Hungarian disease" or the "Swedish disease"; as well as "camp fever" and "gaol fever" since it thrives in filthy conditions where people are kept crammed together. It is caused by the *Rickettsia prowazekii* bacteria and is highly contagious, being spread from person to person by lice, which feed off an infected person. The perfect environment for the louse is the human body, but when the body gets too hot due to fever, or too cold due to death, the lice tries to find another human host to live upon. Meanwhile the bacteria in the lice's stomach multiply and pass into its intestines where they are excreted and can stay active for many days in dried faeces. During this time the louse has bitten its new host, who scratches themselves, and if the person breaks the skin the bacteria can enter the bloodstream.

About 10 days after being infected with typhus symptoms begin to appear, with the person developing a high fever, muscle pains, delirium, severe headaches and nausea. Five days after the symptoms begin a rash develops and the skin has a flushed appearance. The majority of cases are found in 15 to 30 year olds, the age group of many of the soldiers discussed here; although typhus is less common in older humans, it is more virulent. After about two weeks the fever usually breaks, but the person has to have a long convalescence. On the other hand they may slip into a coma, and death soon follows. The mortality rate of those who died from typhus during the seventeenth century is unknown, but death during outbreaks of the disease in the twentieth century has been estimated at up to 15 percent, rising to 60 percent for older people if the disease goes untreated. Secondary infection such as pneumonia is also common, and possibly organ failure.[28]

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[26] Heilmann, vol. I, p.86.

[27] TNA, SP 101/28 f.1; BL, Burney Collection 263/C6/5, *The continuation of our forraine news since 2 this present to 12 January 1632.*

In 1620 typhus ravaged Austria and Bohemia and it was said that 20,000 Bavarian soldiers died from the disease after the battle of White Mountain. Although this figure is certainly an exaggeration, the survivors carried it back to Upper Bavaria and Württemberg. Strict quarantine procedures were adopted in Munich, with infected travellers being shut up in houses on the outskirts of the city and money from infected areas being washed in vinegar.[29]

Another disease which was common in armies was typhoid, which is similar to typhus and spread in the same way, although caused by a different bacteria. During the first week the infected person's temperature rises, accompanied by headaches, malaise and a cough, before they become delirious and spots may also appear on the body. Their diarrhoea has a green appearance and the liver and spleen become enlarged. After about four weeks death occurs in 10 to 20 percent of sufferers.

The skeletal remains of the mass graves show that syphilis was common among the solders. Sores or legions would appear all over the body, especially around the genital area. One of the "cures" often used was mercury, either taken orally, injected or mixed with other ingredients to form a cream which was then rubbed into the sores.

These sores would usually disappear after a time without treatment, but the mercury could cause madness and damage to the nervous system. Even if this "cure" did not drive the sufferer insane, a long-term symptom of syphilis was madness, or what was called in the nineteenth century "general paralysis of the insane".

The "bloody flux", or dysentery, was also a condition a soldier might contract, being caused by unhygienic conditions. Dysentery is one of the oldest gastrointestinal illnesses and there are several types, caused by an organism such as bacteria or parasitic worms found in food or water contaminated by human faeces. Depending on the type of dysentery symptoms can include a high fever, fatigue, headaches, nausea or vomiting and abdominal pains which can lead to complications to the internal organs including kidney failure. However, all types of dysentery result in severe diarrhoea, which sometimes contains blood, hence the name "bloody flux", which can lead to death due to dehydration or organ failure, if left untreated.

Then there were other diseases that were common to civilians and soldiers alike, such as the bubonic plague, which has long been believed spread by the fleas on black rats (*Rattus rattus*). After they gorged themselves on a rat infected by the *Yersinia pestis* bacteria the fleas then fed on humans and so passed on the infection. However, recent research suggests that the rat might be innocent of this crime and that human lice and fleas were responsible, since there are accounts of the plague moving from town to village faster than a rat could travel. Moreover, contemporary accounts blame passing armies for spreading the disease, and the "rat theory" was only introduced in the nineteenth century. Some accounts refer to plague as the "poor's disease" since, like a soldier, the poor were more likely to catch it, since they only had one or two shirts to wear thus rarely changed them and so the sweat and dirt would attract lice and fleas; the rich changed their shirts at least once a day so did not give the lice a chance to infect the garment.

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[28] R.N. Mazumder et al., 'Typhus Fever; an overlooked diagnosis' in *Journal of Health, Population, and Nutrition* (Dhaka Centre for Health and Population Research, June 2009), pp.419–421.

[29] Dr Friedrich Prinzing, *Epidemics Resulting from Wars* (Oxford: Clarendon Press, 1916), p.29, quoting J.C. Rhumelius, *Historia Morbi* (1621); Julius Krebs, *Die Schlacht am Weissen Berge bei Prag* (Breslau: Wilhelm Koebner, 1879), pp.195–199.

Once infected the suffer could develop pneumonic plague, which was spread from human to human by coughing or sneezing. Those infected would develop buboes, usually on the neck, and in the armpits and groin area, and death would almost certainly follow.

In September 1622 plague spread through the ranks of Colonel Sprinzenstein's Regiment so that in just a few weeks its eight companies had to be reduced to four or five, and on 18 December 1625 an outbreak of the "pestilence" in Dillenburg killed 378 people by the time the last victim died on 30 October 1626. It has been estimated that this was about a third of the population.[30]

In 1634 soldiers are said to have caused a severe outbreak of plague in Munich with the occupants of between 200 and 250 houses having to be "shut up" to await their fate. This was the usual way of dealing with the occupants of a house infected by the plague. A guard would be put on the house to make sure none of the occupants escaped until the sickness had run its course with the occupants. It is estimated that 15,000 people died by the time this outbreak subsided that December, and ceased the following February. The dead were buried in mass graves about 40 at a time. In September 1635 the plague again broke out in Munich and raged until February 1637. In all, 80,000 Bavarian families are said to have been wiped out by the plague during the war, although estimates of the population of Bavaria before the war are said to be about one million.[31]

For the majority of soldiers who died in battle or of disease, their burial would be left to the local inhabitants, who would bury the dead in mass pits. The 47 dead from the battle of Lützen were buried in a pit six by seven metres (around 19 by 23 feet) and a depth of 1.10 metres (around 3.5 feet), which accommodated 3.26 bodies per square metre. The Wittstock grave was six by 3.5 metres (around 19 by 11 feet) with an estimated depth of 1.6 to 1.7 metres (around 5 to 5.5 feet) and the bodies were placed in the grave in three or four layers. The alignment and positioning did not always correspond to Christian burial rites, the dead being buried in two rows with their heads placed on the edge of the grave, so some were in the west–east position, while others were in an east–west position. Neither was there much evidence of clothing, which suggests that they had been stripped before burial, either by the local peasantry or their colleagues. Whether the local vicar or priest conducted the burial service is unknown.

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[30] Helml, p.38.

[31] Prinzing, pp.31, 55–56, 77.

Conclusion: Peace at Last

Many had seen the comet in the skies above Germany in 1618, the traditional sign of an impending disaster. In 1635 when the Peace of Prague was signed many believed that the comet had been visible for 15 days and so the war would last 15 years, taken from 1620, and so with the signing of the Peace, peace was now at hand. Unfortunately, they were disappointed and the war continued for a further 13 years.

As 1648 began there was no end in sight to the war, since peace negotiations had been ongoing since 1645. Even the hopes pinned on a separate Bavarian peace – signed on 14 March 1647 at Ulm, which had been popular with the long suffering population of Bavaria, though not its army – was broken in September against the Swedes, followed by the French on 29 December 1647. Even the weather seemed to be against the population, with July 1647 being compared to November, and as Bavarian nun Clara Steiger put it in March 1648, "there came such a cold spell that everyone might have frozen". Then came the Peace of Münster on 30 January 1648, ending the war between France and the Holy Roman Empire, followed by the Peace of Osnabruck on 24 October 1648 between Sweden and the Holy Roman Empire. These peace treaties, which are collectively known as the Peace of Westphalia, finally brought the war to an end. At least one newspaper commented that few could remember such a beautiful day. It was ratified on 8 February 1649.

However, the Peace of Westphalia did not lift the burden of the soldiery from the citizens: the soldiers continued in their garrisons, and the local people still had to quarter them and pay the taxes for their upkeep. It would not be until January 1649 that foreign troops were finally evacuated from Bavaria, and even there was even a fear that the fighting would start again; certainly Spain and France would continue to fight for the next 10 years before they also made peace. This Franco-Spanish War would continue to be fought on German soil, as well as in Flanders, and involved German and even English soldiers, the latter fighting on both sides, with former Royalists fighting for Spain and elements of the Commonwealth Army fighting for France.

For many, 1648 was the beginning of the end of their sufferings. On 13 November 1648 the city of Ulm heard the news and cerebrated as if it were Christmas Day with "sermons, communions and diligent prayers", records Hans Heberle, even though the day before he had fled to the city because of French troops marching through the countryside. News reached Memmingen on 16 November, where Peter Hagendorf was stationed with a detachment of his regiment, which by now was commanded by Major

General Winterscheid. Hagendorf recalls that a "joyous festival" was held, "as if it were Easter or Whitsunday. Three sermons were held in both churches the lesson being from the first book of Moses chapter 8 in which Noah gave thanks after the flood subsided."[1]

Hagendorf does not record how he felt on hearing the news, but his feelings must have been mixed since he had spent 23 years as a soldier and probably knew little else. It was not until October 1649 that the Bavarian Army was finally disbanded. Colonel Ners' regiment was disbanded on 1 October at Augsburg, though it was not until 11 July 1650 that Reven's Regiment was disbanded at Freiburg.[2]

However for many men this did not end their military careers. Andreas Kolb von Raindorf had enlisted in 1620 as a trooper worked his way up the ranks, and in 1642 he was promoted major of Werth's Regiment of Dragoons, became colonel of a regiment of horse in 1643 and major general three years later, and then lieutenant field marshal on 23 July 1647. He was serving in the army again in 1657 and served until 13 April 1666. Ferdinand von Puech had begun the war as an ensign in "Alt Tilly's Regiment of Foot", and ended the war as a colonel. He joined the newly raised Bavarian Army, and in 1685 had risen to the rank of lieutenant general field marshal and was a member of the Elector of Bavaria's council of war.[3]

Winterscheid's Regiment was disbanded on 25 September 1649; Hagendorf received 39 gulden and with his wife and two surviving children set out for Babenhausen the following day. On 29 they reached Nördlingen and then went to Ottingen, where his diary abruptly ends. It is believed that the last three pages are missing, so we might never have known what became of him and his family if it were not for a discovery made by Juliana de Costa Jose, who in 2018 discovered that Hagendorf settled in the town of Gorzke, which belonged to the Duchy of Magdeburg. In the town's parish register there is a reference to the baptism of a Peter, son of "Peter Hagendorf a soldier" and his wife Anna Maria Hagendorf on 9 November 1649. Unfortunately this baby soon died, but there are two other entries in the parish register for Peter and his wife, who both seem to have survived. Hagendorf would have 10 children altogether, but only four survived into adulthood, two of whom were born in Gorzke. He also became the town's mayor and judge. The register for Gorzke also records for 4 February 1679 the burial of Peter Hagen, aged 77. This is believed to be Peter Hagendorf, which would put his date of birth at 1602. It appears that shortly after his arrival in the town he sat down to write his diary, which was found in the Berlin State Library by Jan Peters in 1988.

The Hagendorfs were lucky in that they appear to have settled fairly quickly into a new way of life, but the same cannot be said of other discharged soldiers, who wandered about the countryside often resorting to begging or crime. As one parish in Sweden put it:

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[1] Helfferich, p.302.

[2] Heilmann, vol. 2, p.908.

[3] Bayern Kriegsministerium Kriegsarchiv, *Geschichte des Bayerischen Heeres. Im Auftrage des Kriegs-Ministeriums herausgegeben vom K.B. Kriegsarchiv v* (Munich, 1904), vol. I, Appendix I, pp.7–9.

> So now severe disorder has come due to the never ending begging that severely disturbs the peasantry, both in towns and in the countryside, of children, sick, lame, poor and mariners and soldiers, whom roam around the countryside and who are not pleased with what good people give to them.[4]

While the war was ongoing, elderly soldiers could be hidden among their regiment's strength, but now with the disbandment of the armies there was no place to hide and they would have to throw themselves on the mercy of their friends and families.

Unfortunately, no in-depth study had been made as to what became of the soldiers once they were discharged from the armies of the German states. However, in Sweden of an estimated 600,000 who went to war only about 100,000 came back; many were badly injured, some had lost limbs while others were mentally scarred having lived with violence during as part of their daily life. One Swedish village that has been studied was Bygdeǻ, where 230 men served in the army, of whom only 15 returned home, the remaining 215 dying either from disease or military action. Of these, five returned home disabled leaving just 10 able-bodied men. At the end of the war the population of Bygdeǻ was about 1,500 women to 1,000 men; this decrease of the male population led to a sevenfold increase in women running farms. True, these figures relate to a Swedish village, but there must have been a similar depopulation throughout Europe, with women outnumbering the male population.[5]

To cater for these maimed soldiers Gustavus Adolphus had wanted to establish veterans' homes and a veterans' fund. However, very few homes were established and it was not until 1640 that one appears to have opened which four years later had just 26 ex-officers and soldiers with their families. If one of these soldiers died then their families had to move out and allow another to move in. The veterans' fund appears to have granted ex-soldiers quantities of grain rather than any financial recompense, one soldier receiving five barrels per year, although it is not known whether this was a standard measurement for soldiers.[6] In England a maimed soldier usually received between 20 and 40 shillings annually, although there was a waiting list for pensions. These pensions were distributed by a county's quarter sessions, so a pensioner would have to either die or be stripped of his pension before another ex-soldier was granted it, no matter how badly injured he had been.

In Sweden as early as the 1560s a soldier could be admitted to a hospital as long as they had a letter from the king, and during the English Civil War soldiers could be admitted to one of the already established hospitals. It was not until later in the century that purpose-built hospitals were established to cater for more than a token number of soldiers, such as L'Hotel des Invalides in Paris, which was established by Louis XIV in 1672, while in 1692 Chelsea Hospital in London – which had been commissioned by Charles II – finally opened its doors to pensioners.

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[4] Quoted in offprint of Erik Petersson, 'Wounded Veterans and the State: The precursor of the veteran's home in Sweden', *Scandinavian Journal of History*, 2014, vol. 39, no. 2, p.7.

[5] Parker, *The Thirty Years' War*, p.193; Jan Lindegren, *Utskrivning och Utsugning Production och reproduction i Bygdeå, 1620–1640* (Stockholm: Almquist and Wiksell International, 1980) pp.300–301.

[6] Petersson, p.9.

However, in some ways Bavaria was lucky. On the one hand since Maximilian relied heavily on mercenaries from other German states and parts of Europe the death rate among the Bavarian population would not have been so great as Sweden's. On the other hand Sweden had not been overrun by troops (enemy or friendly) during the war which had laid waste to vast parts of the countryside. What measures Maximilian introduced to provide for his soldiers that came from Bavaria is still to be researched.

Appendix I

A 400-Year-Old Collection of Military Flags in the Swedish Army Museum

The prominent role played by Sweden during the later stage of the Thirty Years' War has left a substantial and material legacy in the form of a unique collection of military flags, today kept in the Swedish Army Museum in Stockholm. While not widely known, the so-called State Trophy Collection has caught the interest of many specialists throughout Europe. The total number of objects amounts to some 3,500 infantry colours, cavalry standards, lance pennons and ships flags – all taken as war trophies from the early seventeenth century up until 1814.

The condition of the flags varies greatly. Only fragments remain of some while others look almost as good as new. In spite of more than one hundred years of continuous efforts, only a small percentage of the flags have undergone conservation. In some cases, it is not even possible to unfurl the flag from its stave for fear of ripping the delicate silk fabric. However, the museum holds a priceless source of information regarding the original state of the flags – thirty volumes of colour depictions executed by the artist Olof Hoffman from 1677 up until his death in the first decade of the 1700s. The gouache paintings were made on the order of Charles XI with the explicit purpose to preserve the memory of Swedish victories for all eternity. In the early twentieth century a comprehensive inventory of the collection was made and additional depictions were made of the flags added to the collection after Hoffman's death.

Flags and other types of field ensigns have constituted desirable war trophies for as long as we know. As tokens of victory they have been paraded through cities and deposited in temples, churches and museums to memorialise martial prowess. Written records confirm that this ancient tradition was upheld in Sweden at least as early as during the reign of Gustav Vasa in the early sixteenth century. While no trophy flags from this period are preserved we have no reason to doubt that conquered enemy flags were kept in the royal collections or in the Arsenal. But it is not until Sweden joined the Thirty Years' war that we have some scattered archival documents recording the delivery of flags into the Royal Armoury. Unfortunately, only the number of flags is mentioned together with the name of the courier and the place of battle. The lack of individual descriptions of the flags makes it hard to connect the record with the existing objects in our collection. For example, an entry from November 6th 1631 reads: "Has Carl Mörner, who has arrived from Germany, delivered, which are taken at Leipzig – 19 cavalry flags and 70 infantry flags".

In 1686 an inventory was taken of the trophy collection and a new kind of record was made. All the flags have detailed descriptions. The ones taken in the most recent war against Denmark have fairly reliable data about where they were taken while the ones taken in the Thirty Years' War are divided into more nebulous groups such as "Imperial" and "Saxon". How much can then be known about the provenance and identity of the flags? Since no coherent record has been kept of where, when and from whom the flags have been conquered very few objects have a reliable attribution. However, by comparing existing contemporary sources, historical research and not least the motifs of the flags themselves many plausible hypotheses have been put forward by scholars and curators through the years.

To identify Bavarian colours and standards in the Swedish trophy collection is not an all together easy task. Some banners carry the coat or arms or the monogram of Duke Maximilian I, for example the standard ST 14:11. Others can with some certainty be attributed to a specific person as is the case of the four company colours depicting the shrine of Our Lady of Altötting, taken at the battle of Breitenfeld in 1631. The unusual motif and the close connection between Field Marshal Johan Tserclaes, Count of Tilly, and the shrine rules out any other attribution. It is fair to assume that flags made in the heraldic colours of Bavaria – white and blue – would be made for Bavarian regiments. That is the case for the five colours (ST 14:3, 5–8) which through historical sources can be traced to the battle at Rinteln on March 12th 1633, where they were conquered from the Jung Tilly regiment. However, as can be seen in the excellent publication by Jurgen Kraus, "Bayerische Fahnen" from 2017, the use of the Bavarian heraldic colours, blue and white, was common but not obligatory. A good many of the Bavarian banners used during the Thirty Years' War were made in other colours carrying common religious or emblematic motifs.

No doubt there is room for more research on Bavarian colours and standards in the Swedish collection for years to come.

Karin Tetteris, Curator
Armémuseum, Stockholm, Sweden

Appendix II

Regiments of the Bavarian Army

Colonel Albert's Regiment of Foot
See Haimhausen's Regiment

Colonel Johann Aldringen's Regiment of Foot
Raised in 1622 and was eight companies strong, but disbanded in 1623.[1]

Colonel Johann Jakob Freiherr von Anholt's Regiment of Foot
Raised on 25 November 1619, and in 1620 mustered 3,150 men in 14 companies, although at the battle of Lutter it was 2,279 strong in 13 companies. On 21 February 1631 Count Johann Baptist von Lodron took over the regiment before being succeeded by Colonel Gottfried Count Huyn von Geleen later that year.

Colonel Johann von Ruischenberg took over the regiment on 23 November 1638. He commanded it until 11 April 1648 when he was succeeded by Field Marshal Hans Wilhelm von Hunoltstein. On 25 August 1648 Field Marshal Adrian von Enkefort or Enkenvort took over the regiment and commanded it until it was disbanded in 1649.

The regiment was present at the battles of Wiesloch, Wimpfen, Höchst, Stadtlohn, Werben, Lutter, Zusmarshausen, and Breitenfeld – where it is estimated to have lost about 1,600 out of 2,000 of its strength – Werben, Hessich Oldendorf, Wittenweier, Tuttlingen, Freiburg, Herbsthausen, Jankau, Freiburg and Allerheim.[2]

Bartl's Regiment of Dragoons
Formerly Creuz's Regiment which was raised in 1641–42. In 1647 it mustered 723 men in 10 companies. The regiment was at Lech during the battle of Zusmarshausen.

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[1] Goetz, 1904, p.122.

[2] William P. Guthrie, *Battles of the The Thirty Years War, from White Mountain to Nördlingen, 1618–1635* (London: Greenwood Press, 2002), vol., I, p.35; Weber, pp.406–407.

Colonel Jacob Bauer von Eisenbeck's Regiment of Foot
Raised 1619 in Würzburg and mustered about 1,500 men in six companies and commanded by Colonel Jacob Bauer von Eisenbeck. On 11 April 1621 Bauer was killed at Frauenberg and his regiment passed to Colonel Wolf Dietrich von Truchsess von Waldburg. and then in 1624 Lieutenant General Tserclaes von Tilly became the commander and it became known as the Alt (old) Tilly Regiment. The following year it mustered 2,686 men in 11 companies. However it was almost completely destroyed at the battle of Breitenfeld in 1631, where it lost at least four of its colours. In 1632 it was brought up to strength again mustering 1,600 strong in 10 companies. A detachment of 400 men was at the crossing of the Lech and three companies (300 strong) were garrisoning Gottingen and Minden. After Tilly's death on 20 April 1632 the regiment passed to General of the Ordnance Duke Franz Rudolf von Saxon Lauenburg, and was then known as the "Saxon Regiment".

However on 30 December 1632 the regiment passed to General of the Ordnance Otto Heinrich Graf von Fugger and then from 2 May 1635 Colonel Ferdinand Depp. It then passed to Colonel Ferdinand De Puech on 22 August 1637 and then to a Colonel Miehr. On 15 September 1644 Miehr was succeeded by a Colonel Cobb who commanded it until the regiment was disbanded in 1649.

The regiment was at Lech during the battle of Zusmarshausen, but it was present at the battles of White Mountain, Wiesloch, Wimpfen, Höchst, Stadtlohn, Lutter, Magdeburg, Werben, Breitenfeld, Lech (detachment 400 strong), Nuremberg, Nördlingen, Tuttlingen, Wittenweier, Freiberg, Herbsthausen, Allerheim and Jankau.[3]

Colonel Wilhelm von Beldin's Regiment of Foot
Raised in 1642 and disbanded in 1649.

Bock's Regiment of Cuirassiers
See Neu Cratz's Regiment.

Raised 1621, mustering in 1625, mustering 529 men in five companies and was present at the battles of Dessau and Lutter.

Colonel Stephan Binder's Regiment of Cuirassiers
Raised 1634, by Colonel Stephan Binder who commanded the regiment until 9 May 1637 when he was succeeded by Colonel Andreas Kolb von Raindorf. The regiment was known as Alt Kolb and in 1638 it mustered nine companies. In 1648 it was at Schmutter and the following year was disbanded.

It was present at the battles of Rheinfelden, Wittenweier, Wolfenbüttel, Tuttlingen, Freiburg, Herbsthausen, Allerheim and Dachau.

Colonel Kaspar Blarer's Regiment of Foot
Raised 1623 and disbanded 1631.

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[3] Heilmann, p.902; Weber, pp.406–407.

Colonel Engelbert Bonninghausen's Regiment of Cuirassiers
Raised May 1619 and mustered 10 troops. In 1622 the regiment's lieutenant colonel, Lorenzo Maestro took over the regiment and commanded it until it was disbanded in 1629.

The regiment served in served in Austria, Moravia, Silesia and Upper Austria and was present at the battles of White Mountain, Wiesloch, Wimpfen, Lorscher Heide, Höchst and Stadtlohn.[4]

Colonel Giovanni Battista di Bracciolini's Regiment of Horse
Raised 1631 and was in Memmingen in 1633. It was present at Geltolfing and Nördlingen.

Colonel Johan Buck or Puck's Regiment of Foot
See Mortaigne's Regiment

Colonel Bruno Busch's Regiment of Cuirassiers
Raised 1633 and mustered six companies and was present at Nördlingen.

Colonel Johann Franz von Caffoy's Regiment of Foot
Raised and disbanded in 1645.[5]

Colonel Cordenbach or Courtenbach's Regiment of Horse
At the beginning of August 1624, his regiment of '5 cornets' was reported to be with Tilly and was present at Efferding, Rossing and Lutter.[6]

Cosalky's Regiment of Harquebusiers
See Nivenhaim's Regiment

Colonel Jakob Fürstenberg Cratz's Regiment of Cuirassiers
Raised in 1620. The regiment was later commanded by Ludwig Graf von Fürstenberg. In 1625 Phillip Cronberg took over the regiment and then from 8 August 1634 Colonel Adam Heinrich Keller. On 20 September 1635 the regiment's lieutenant colonel, Christoph Heinrich von Gayling zu Altheim took over the regiment who commanded it until it was disbanded in 1649.

Present at the battles of Rakonitz, White Mountain, Lorscher Heide, Höchst, Stadtlohn, Rossing, Lutter, Werben, Breitenfeld, crossing the Lech, Nurnburg, Nördlingen, Rhinefelden, Wittenweier, Wolfenbüttel, Tuttlingen, Herbsthausen, Allerheim, Zusmarshausen.

Colonel Johann Phillip Cratz's Regiment of Cuirassiers
Raised 1620 by Johann Phillip Cratz, mustering 823 in eight companies. In 1623 Matthias von Bock took over the regiment and commanded it until 1627

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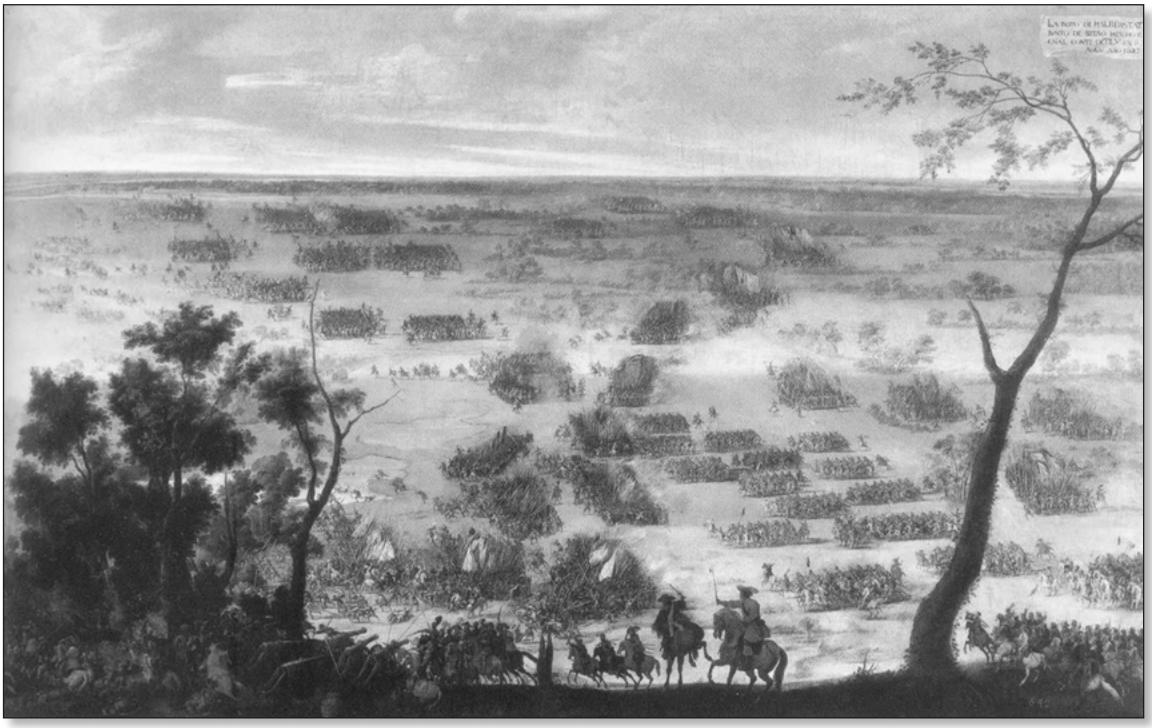
[4] Wertheim vol. II, pp.577–578; Weber, pp.406–407.

[5] Goetz, p.123.

[6] *A Continuation of the former news*, 9–10 September 1624; Weber, pp.406–407.



Battle of Stadtlohn in 1623. A decisive victory for the Catholic League Army led by Tilly, against the troops of Christian of Brunswick. Pieter Snayers.

when he was succeeded by Colonel Frederich Waldeck. It was disbanded in 1629(?). Heilmann does not mention this regiment in his summary of Cratz.

The regiment was present at Wimpfen, Hagenau and Lutter.[7]

Colonel Johann Phillip Cratz's Regiment of Harquebusiers

On 9 February 1622 he received a commission to raise 500 harquebusiers, later Jakob Ludwig von Fürstenberg, then Adam Philip von Cronberg, being disbanded 1634.

Colonel Cratz's Regiment of Horse

Raised 1631 and disbanded in 1633 when he was captured by the Swedes.

The regiment served at the battles of Bamberg, Lech and Nuremberg.

Colonel Cronberg's Regiment of Cuirassiers

See Jakob Fürstenberg Cratz's Regiment

Colonel Nicholas Desfour's Regiment of Harquebusiers

Raised in 1622 and disbanded in 1624, serving at the battles of Wimpfen, Lorscher Heide, and Stadtlohn.[8]

Colonel Ferdinand De Puech's Regiment of Foot

See Colonel Johann Bauer von Eisenbeck's Regiment

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[7] Wertheim, vol. II, Weber, pp.406–407; Heilmann, vol. II, p.1118.

[8] Wertheim, vol. II, p.572; Weber, pp.406–407; Heilmann, vol. II, p.1118.

Colonel Edlinstellen's Regiment of Foot

See Ruepp's Regiment

Colonel Dietrich Ottmar von Erwitte's Regiment of Cuirassiers

Raised 22 August 1619 in Bavaria and Neuberg by Colonel Dietrich Ottmar von Erwitte, and composed 858 men in 10 companies. In 1631 Colonel Johan von de Horst took over the regiment until 1639 when it passed to Kaspar Mercy. Then on 11 August 1644 Flechenstein took over command. In 1648 the regiment was at Schmutter and the following year it was disbanded.

The regiment was present at the battles of Prag, Lorscher Heide, Höchst, Stadtlohn, Rossing, Lutter, Werben, Breitenfeld, Hessich Oldendorf, Rheinfelden, Wittenweier, Ziegenhain, Wolfenbüttel, Tuttlingen, Freiburg, Jankau, Herbsthausen, Allerheim, and Zusmarshausen.

Colonel Dietrich Ottmar von Erwitte's Regiment of Foot

Raised 28 April 1625 and mustered 1,000 men in four companies, however later that year Colonel Matthias Gallas, who took the regiment into Imperialist service, rather than Bavarian service. From 1629 Colonel Joachim von der Wahl, who had been the regiment's lieutenant colonel, took over the regiment. Colonel von Beauneau became the next inhaber on 16 September 1644 followed by Colonel Marimont on 14 May 1645. In 1649 the regiment was disbanded.[9]

The regiment was present at the battles of Dessau, Lutter, Magdeburg, Werben, Breitenfeld, Bamberg, Rain, Rheinfelden, Wolfenbüttel, Herbsthausen, Allerheim and Zusmarshausen.

Colonel Raymond de la Espagne's Regiment of Harquebusiers

Raised 1631 for Imperialist service and transferred to the Bavarian Army in 1634. According to Goetz it was later commanded by W. Casselky who commanded it until 1648 when it was disbanded.[10]

The regiment was present at the battles of Bamberg, Lech, Nuremberg and Nördlingen.

Colonel Winandt von Eynatten's Regiment of Harquebusiers

Raised 1619 by Colonel Herman von der Lippe in Cologne. However by June 1620 it had been taken over by Colonel Winandt von Eynatten and by 1624 de Grana. On 9 September 1631 it mustered three companies of cuirassiers and two of harquebusiers, a total of 500 men. In 1632 Salis took over the regiment who commanded it until 1634, when it passed to Johann von Werth, when it became known as the Neu or New Werth Regiment. In 1644 it became Johann Jakob Kolb's or "Jung" or young Kolb's regiment and was disbanded in 1649.

The regiment was present at the following battles: White Mountain, Wiesloch, Wimpfen, Lorscher Heide, Höchst, Stadtlohn, Gerolfing,

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[9] Heilmann, p.904; Bayern Kriegsministerium Kriegsarchiv, vol. I, pp.114–116; Weber pp.406–407.

[10] Goetz, p.121; Weber, pp.406–407.

Nördlingen, Wittenweier, Wolfenbüttel, Tuttlingen, Herbsthausen, Allerheim and Zusmarshausen.[11]

Colonel Falkenburg's Regiment of Horse

The lieutenant colonel was Trost, who commanded the regiment at Magdeburg, where it was 800 strong.[12]

Colonel Fleckenstein's Regiment of Cuirassiers

Raised 1620 and in 1642 mustered nine companies. It was present at the battles of second Breitenfeld and Jankau.

Colonel Wilhelm von Forstenau's Regiment of Foot

Raised and disbanded in 1645.[13]

Colonel George Franz Fugger's Regiment of Foot

Known to have existed between 1647 and 1649.[14]

Colonel Jakob Fugger's Regiment of Horse

Raised 1631 and disbanded 1634.

Colonel Otto Heinrich Graf von Fugger's Regiment of Croats

The regiment was raised in 1631. The regiment also seems to have included a company of dragoons, and in May 1635 it became Major General and Lieutenant Field Marshall George Truckmuller's Regiment.[15]

Colonel Otto Heinrich Graf von Fugger's Regiment of Foot

Raised 10 May 1631 by Colonel Otto Heinrich Graf von Fugger. From 10 December 1632 Colonel Johann von Troiberz took command and the regiment became known as the "Saxon Regiment". Troiberz was killed at Regensburg on 4 June 1634. It was not until on 16 August 1634 that Colonel Bartholomew von Hartenberg took over the regiment. Sources differ as to the later commanders, according to Weber Hardenburg was succeeded by George Rudolf Haslang and then Ferdinand von Puech who took over the regiment on 15 September 1644 and commanded it until it was disbanded in 1649. However, Goetz listing it under Hartenberg's name suggests the regiment was later commanded by Johann von der Horst, Heresheim and finally Mercy.

The regiment was with Pappenheim in 1631 and 1632 and present at the battles of Nördlingen, Rheinfelden, Wittenweier, Wolfenbüttel, Tuttlingen, Freiberg, Herbsthausen, Allerheim, and Zusmarshausen.[16]

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[11] Wertheim, vol. 2, pp.571–572; Weber, pp.406–407.

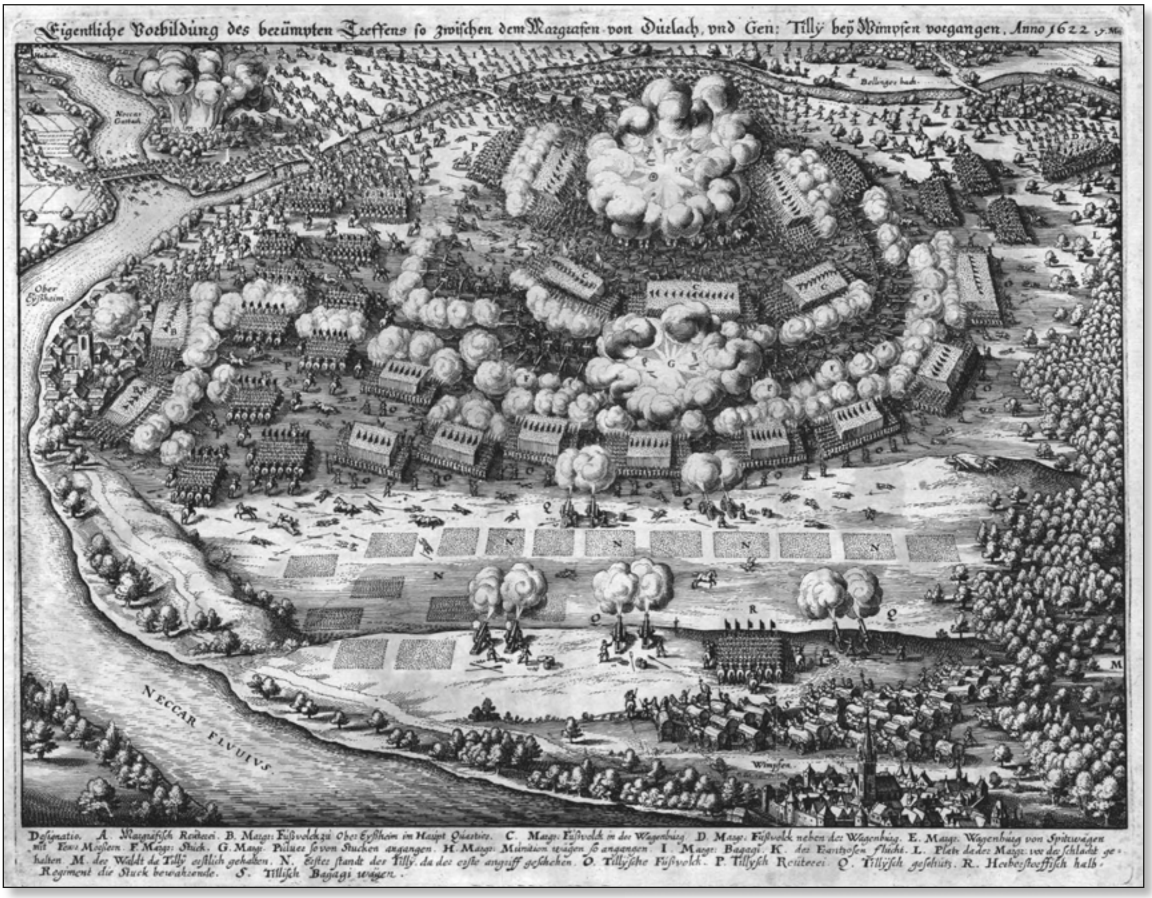
[12] Antonie Charles Hennequin Villermont, *Tilly: oder Dreissigjährige Kreig von 1618 bis 1632* (Schaffhausen: Fr Hurterschen, 1860), p.227; Weber, pp.406–407.

[13] Weber, pp.406–407.

[14] Weber, pp.406–407.

[15] Engerisser and Hrnčiřík, pp.285–286.

[16] Heilmann, p.904; Bayern Kriegsministerium Kriegsarchiv, vol. I, pp.114–116; Weber, pp.406–407; Goetz, p.123.


Eigentliche Vorbildung des berümpten Treffens ſo zwiſchen dem Margrafen von Durlach, vnd Gen: Tilly bey Wimpfen vorgangen. Anno 1622.
Bellinger bach
Ober Eyſheim
Wimpfen
NECCAR FLVVIVS
Designatio. A. Margräfiſch Reüterei. B. Margr: Fuſvolck zu Ober Eyſheim im Haupt Quartier. C. Margr: Fuſvolck in der Wagenburg. D. Margr: Fuſvolck neben der Wagenburg. E. Margr: Wagenburg von Spitzwägen mit Feur Mörſern. F. Margr: Stück. G. Margr: Pulver ſo von Stucken angangen. H. Margr: Munition wägen ſo angangen. I. Margr: Bagagi. K. der Engliſchen flucht. L. Platz da der Margr: vor der ſchlacht gehalten. M. der Waldt da Tilly erſtlich gehalten. N. Erſter ſtandt der Tilly, da der erſte angriff geſchehen. O. Tillyſche Fuſvolck. P. Tillyſch Reüterei. Q. Tillyſch geſchütz. R. Herberſtorffiſch halb Regiment die Stuck bewahrende. S. Tilliſch Bagagi wägen.

Battle of Wimpfen in 1622. (Riksarkivet)

Colonel Egon Fürstenberg's Regiment of Cuirassiers

The regiment was raised in 1619 under Fürstenberg, before becoming Virmond's and later von der Nerssen's regiment. In 1628 it was reportedly disbanded, but according to *Die Kriegskosten Bayerns* Jakob Ludwig von Fürstenberg, then Adam Philip von Cronberg took over the regiment.

The regiment was present at Lorscher Heide, Höchst and Stadtlohn.

Colonel Egon Fürstenberg's Regiment of Foot

Raised 1621, but the following year it was reduced into Hohenzollern's regiment.

Present at the battles of Wiesloch and Wimpfen.

Colonel Friedrich Rudolf Fürstenberg's Regiment of Horse

Raised 1632. In 1635 Colonel von der Horst took over the regiment who reduced it into his other regiment of horse, although according to Goetz Punder took over the regiment and commanded it until 1636 when it was disbanded.

The regiment served at the battles of Maastricht and Nördlingen.

Colonel Friedrich Rudolf Fürstenberg's Regiment of Foot
Raised 1631, disbanded 1633.

Colonel Fürstenberg's Regiment of Foot
See Mortaigne's Regiment

Colonel Fredrich von Gaisberg's Regiment of Foot
Raised April 1621. Gaisberg commanded until 1622, when Graf Hohenzollern took over and commanded until the regiment was disbanded in 1623.

It was present at the battles of Wimpfen and Höchst.

Gallas' Regiment of Foot
See Erwitte's Regiment

Colonel Heinrich Christopher von Gayling's Regiment of Cuirassiers
See Colonel Jakob Fürstenberg Cratz's Regiment.

Geleen's Regiment of Foot
See Anholt's Regiment

Major General Gil de Haes' Regiment of Horse
Captain Johann Bartl was a captain in the regiment in 1642. In 1645 he became a lieutenant colonel, and then in September 1647 took over the command of Kreuz's regiment of dragoons. In 1657 he served as a captain of a troop of horse and on 1 September 1673 commanded a regiment of dragoons.

Major General Gil de Haes' Regiment of Foot (I)
Raised 1640 by *Generalwachtmeister* Gil de Haas. He was succeeded possibly by Ludinghausen, then in 1642 by a Colonel Gold. On 11 July 1646 Colonel Burkhard von Elter became the regiment's commander. On 26 June 1649 Colonel Johann Wilhelm Suler.

Present at the battles of Wolfenbüttel, Ziegenhain, Tuttlingen, Freiburg, Herbsthausen, Allerheim and Zusmarshausen.[17]

Major General Gil de Haes' Regiment of Foot (II)
Raised 1644 and mustered 2,000 men in 10 companies, by *Generalwachtmeister* Gil de Haas. On 27 October or 18 November 1646 he was succeeded by Colonel Wilhelm Beltin, who had been the regiment's lieutenant colonel. The regiment was disbanded in 1649.

The regiment was present at the battles of Jankau and Allerheim.

Colonel Gold's Regiment of Foot
See Gil de Haes' Regiment

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[17] Heilmann p.904; Bayern Kriegsministerium Kriegsarchiv, vol. I, pp.114–116; Weber, pp.406–407.

Field Marshal Johan von Götz's Regiment of Cuirassiers

Raised 1635 or 1636, in 1638 Lowenstein took command of the regiment and Lapierre in 1642, who commanded it until the regiment was disbanded in 1649. The regiment was present at the battle of Wittenweier, Wolfenbüttel, Tuttlingen and Jankau.[18]

Field Marshal Johan von Götz's Regiment of Foot

See Herliberg's Regiment

Colonel Gouschenitz's or Guschenitz's Regiment of Croats

Raised 1645 and disbanded in 1649.[19]

Colonel Gronsfeld's Regiment of Foot

See Herliberg's Regiment

Colonel Theodor von Haimhausen's Regiment of Foot

Raised 1619 and composed of eight or nine companies of about 1,800 men. From 22 October 1624 the regiment passed to Count Werner von Tilly and it became known as Jung (or young) Tilly's Regiment. On 20 June 1633 its lieutenant colonel, Stefan Alber, took over the regiment which at that time was garrisoning the towns of Minden, Bremen and Osnabruck. Colonel Marshalt or Marschalk succeeded Alber on 10 May 1635, who was killed at the battle of Wittenweier. He was succeeded by *Generalwachtmeister* Hans Wilhelm Vogh von Hunoltstein on 2 February 1639. Finally Colonel Franz Rouyer commanded the regiment from 19 August 1642, who commanded it until 1649 when it was disbanded.

The regiment was present at the battles of Wiesloch, Wimpfen, Höchst, Stadtlohn, Lutter, Magdeburg, Maastricht, Rinteln, Hessich Oldendorf, Wittenweier, Breisach, Wolfenbüttel, Freiburg and Allerheim.[20]

Colonel Harthausen's Regiment of Cuirassiers

Raised 1634. The regiment was present at the battle of Wittenweier, where Harthausen was killed.

Colonel Alexander von Haslang-Sulz's Regiment of Foot

Raised May or June 1619 and composed 20 companies of 2,000 strong, On 24 October Haslang died at Rakonitz. Despite the death of its colonel the regiment went on to take part in the battle of White Mountain, but in January 1621 was broken up and used to reinforce other regiments.[21]

Colonel Haslang's Regiment of Foot

See Fugger's Regiment

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[18] Goetz, p.122; Bayern Kriegsministerium Kriegsarchiv, vol. I, p.116; Weber, pp.406–407.

[19] Weber, pp.406–407

[20] Heilmann, p.902; Bayern Kriegsministerium Kriegsarchiv, vol. I, p.115; Weber, pp.406–407.

[21] Reitzenstein, p.215.

Colonel Hans Heinrich Haslang's Regiment of Cuirassiers

Raised 1632 and mustered five troops. On 10 December 1638 Colonel Hans Ludwig von Loewenstern took over the regiment by which time it mustered 10 troops. At the battle of Wittenweier the regiment's lieutenant colonel was killed and in 1642 the command fell to Lapierre, who commanded the regiment until it was disbanded in 1649.[22]

The regiment was present at the battles of Wittenweier, Wolfenbüttel, Tuttlingen, Jankau, Herbsthausen, Freiburg, Allerheim and Zusmarshausen.

Colonel George Rudolf Haslang's Regiment of Foot

Although Weber does not list this regiment it is known to have existed between 1633 and 1647 and was commanded by Haslang, Johan de Werth and Karl von Marimont.[23]

Colonel Baron Adam von Herbersdorf's Regiment of Cuirassiers

Raised 24 November 1619. In 1621, when Herbersdorf became governor of Upper Austria, the regiment was reorganised and five troops were placed under Pappenheim's command, although it was not until April 1622 that he became the colonel. In 1625 it was 1,946 strong in 10 troops. It was composed of four cuirassier troops and one armed as harquebusiers and possibly two troops of Croats. However by February 1629 when both regiments were disbanded upon Herbersdorf's death, it mustered a total of 16 troops.[24]

During 1621 the regiment was serving in Upper Austria and the Lower Palatine and was present at the battles of Wiesloch, Wimpfen, Lorscher Heide, Höchst, Stadtlohn and Lutter.[25]

Colonel Baron Adam von Herbersdorf's Regiment of Foot

Raised on 18 September 1621 in Upper Austria and part of Breisgau and disbanded in February 1629. The regiment served in Upper Austria and Upper Palatinate and was present at the battles of Wimpfen, Höchst and Lutter.

Colonel Hannibal von Herliberg's Regiment of Foot

Raised 1619 and composed 10 companies of about 1,250 men. In 1627 it was taken over by Colonel Jodok Maximillian Graf von Gronsfeld and then on 2 May 1635 by *Generalwachtmeister* Hans Wilhelm Schellhammer. However, Schellhammer did not command it for long: later that year General of the Ordnance Graf von Gronsfeld was appointed colonel of the regiment followed by Field Marshal Johann Graf von Götz on 11 July 1636. After Götz was suspended from service, General of the Ordnance Franz Freiherr von Mercy took command of the regiment on 7 December 1638. After the battle of Allerheim on 3 August 1645 his son Maximilian Leopold Mercy (young Mercy) took command 10 days later.

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[22] Reitzenstein, p.122.

[23] Goetz, p.123.

[24] Wertheim, vol. II, pp.337, 573, 578; Weber, pp.406–407.

[25] Wertheim, vol. II, pp.573–576; Weber, pp.406–407.

The regiment was present at the battles of White Mountain, Lutter, Wittenweier, Jankau, Freiberg, Allerheim, and Zusmarshausen.

Colonel Franz von Herzelles' Regiment of Cuirassiers (Würzburg Regiment)

Raised 1620 in Bavaria and Würzburg by Bishop Johann Gottfried and known as the "Würzburg Regiment". In 1625 Otto Friedrich von Schonberg took command of the regiment, but was killed at the battle of Breitenfeld. On 30 October 1631 he was succeeded by the regiment's lieutenant colonel, Maximilian de Billehe. Billehe died at the battle of Nördlingen, but it was not until April 1635 that Carl Duke of Lothringen IV was appointed colonel, at which time it mustered nine troops, which by 1638 had increased to 13.

It was present at the battles of White Mountain, Wiesloch, Wimpfen, Lorscher Heide, Nuremberg, Nördlingen, Rheinfelden (though not the second battle), Wittenweier, Wolfenbüttel, Tuttlingen, Herbsthausen, Allerheim, and Zusmarshausen.[26]

Colonel George Ernst Graf Hohenzollern-Sigmaringen's Regiment of Foot

During the summer of 1621 it mustered eight companies, but was disbanded in 1623.[27]

Colonel George Fredrich von Holz's Regiment of Foot

See Mortaigne's Regiment

Colonel Horst's Regiment of Harquebusiers

Formerly Erwitte's regiment.

***Generalwachtmeister* Johann von der Horst's Regiment of Foot**

Raised in 1640 by Major General Johann von der Horst, it later became Caspar Mercy's and then Martin Moderspachs' regiment and was disbanded in 1649.[28]

The regiment was present at the battle of Tuttlingen.[29]

Colonel Kobbich's Regiment of Foot

Raised and disbanded in 1647

Colonel Kolb's Regiment of Cuirassiers

See Binder's Regiment

Colonel Kurnreuter's Regiment of Dragoons

Raised 1644, although Kurnreuter enjoyed his command only briefly because later in the year the regiment passed to "jung Kolb", who in 1647 reduced his two regiments into one.

It was present at the battles of Freiberg and Allerheim.

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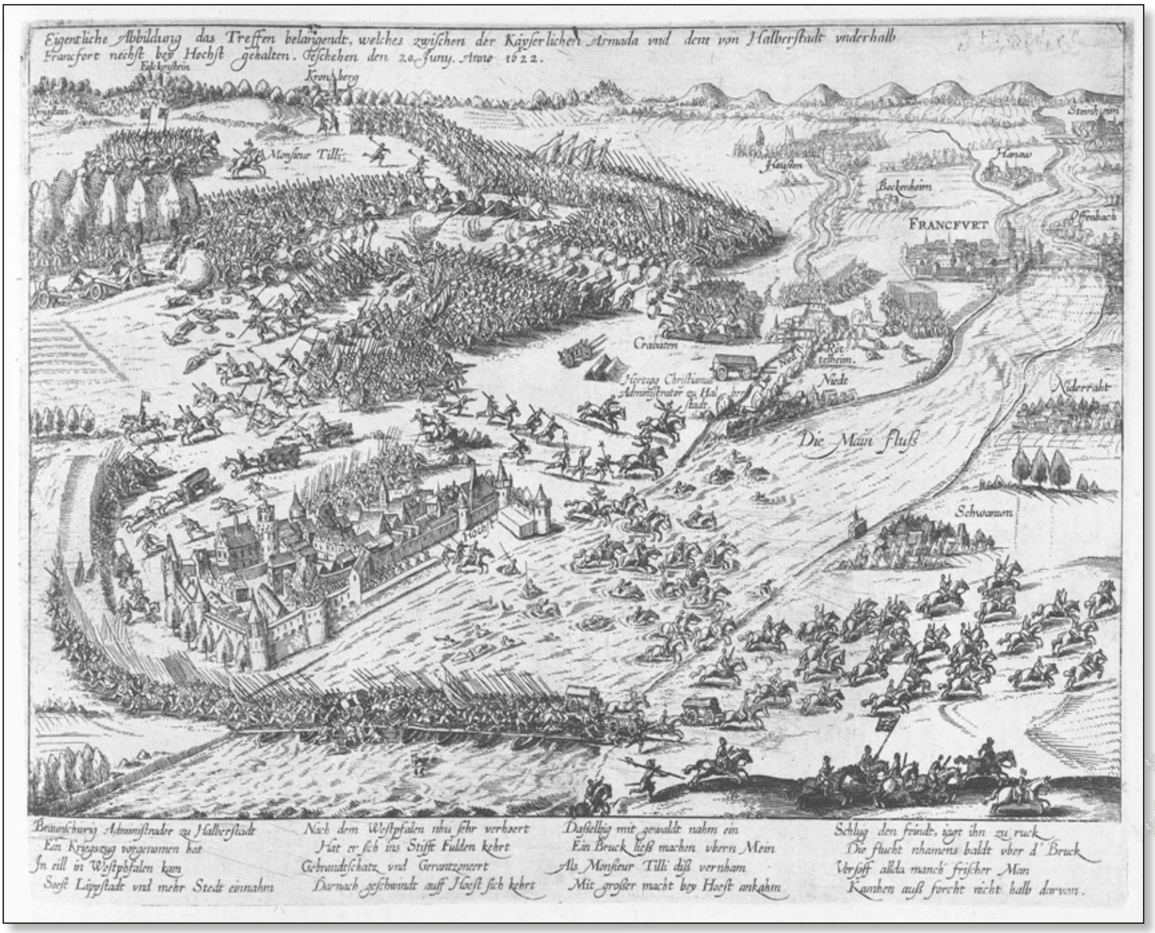
[26] Wertheim, vol. II, p.579; Weber, pp.406–407; Engerisser and Hrnčiřík, p.284.

[27] Wertheim, vol. II, p.594; Goetz, p.123.

[28] Goetz, p.121.

[29] Bayern Kriegsministerium Kriegsarchiv, vol. I, p.115; Weber, pp.406–407.


Eigentliche Abbildung das Treffen belangendt, welches zwiſchen der Kayſerlichen Armada vnd dem von Halberſtadt vnderhalb Francfort nechſt bey Hochſt gehalten. Geſchehen den 20. Juny. Anno 1622.
Falckenſtein
Kronberg
Monſieur Tilli
Hauſen
Hanaw
Steinheim
Bockenheim
Offenbach
FRANCFVRT
Crabaten
Hertzog Chriſtianus Adminiſtrator zu Halberſtadt
Nidt
Die Main fluſs
Niderraht
Schwanum
Hoechſt
Braunſchweig Adminiſtrador zu Halberſtadt
Ein Kriegszug vorgenomen hat
In eill in Weſtphfalen kam
Soeſt Lippſtadt vnd mehr Stedt einnahm
Nach dem Weſtpfalen nhu ſehr verhoert
Hat er ſich ins Stifft Fulden kehrt
Gebrandtſchatz vnd Gerantzoneert
Darnach geſchwindt auff Hoeſt ſich kehrt
Daſſelbig mit gewaldt nahm ein
Ein Bruck ließ machen vbern Mein
Als Monſieur Tilli diß vernham
Mit groſſer macht bey Hoeſt ankahm
Schlug den feindt, iagt ihn zu ruck
Die flucht nhamens baldt vber d' Bruck
Verſoff allda manch friſcher Man
Kamben auß forcht nicht halb darvon.

Battle of Höchst in 1622. Workshop of Frans Hogenberg 1622–1624. (Rijksmuseum)

Colonel Valentin von Landsberg's Regiment of Foot
Raised 1620 in Cologne and known as the Cologne Regiment. In 1623 Otto Ludwig von Plankhart took command, followed by Reven in 1635.

The regiment was present at the following battles: White Mountain, Höchst, Stadtlohn, Magdeburg, Werben, Breitenfeld, Bamberg and Rain.

Colonel Lapierre's Regiment of Cuirassiers
See Haslang's Regiment, although it may possibly have been Götz's Regiment.

Colonel Limbach's Regiment of Dragoons
Raised 1633 in 10 companies and was present at the battle of Wittenweier.

Colonel Thimon von Lintelo or Lindlo's Regiment of Cuirassiers
Raised 1620 and was disbanded in 1632. The regiment was present at the battles of Lorscher Heide, Höchst, Stadtlohn, Eferding, Lutter, Breitenfeld, Maastricht, with Pappenheim in 1631–32, and Lützen.[30]

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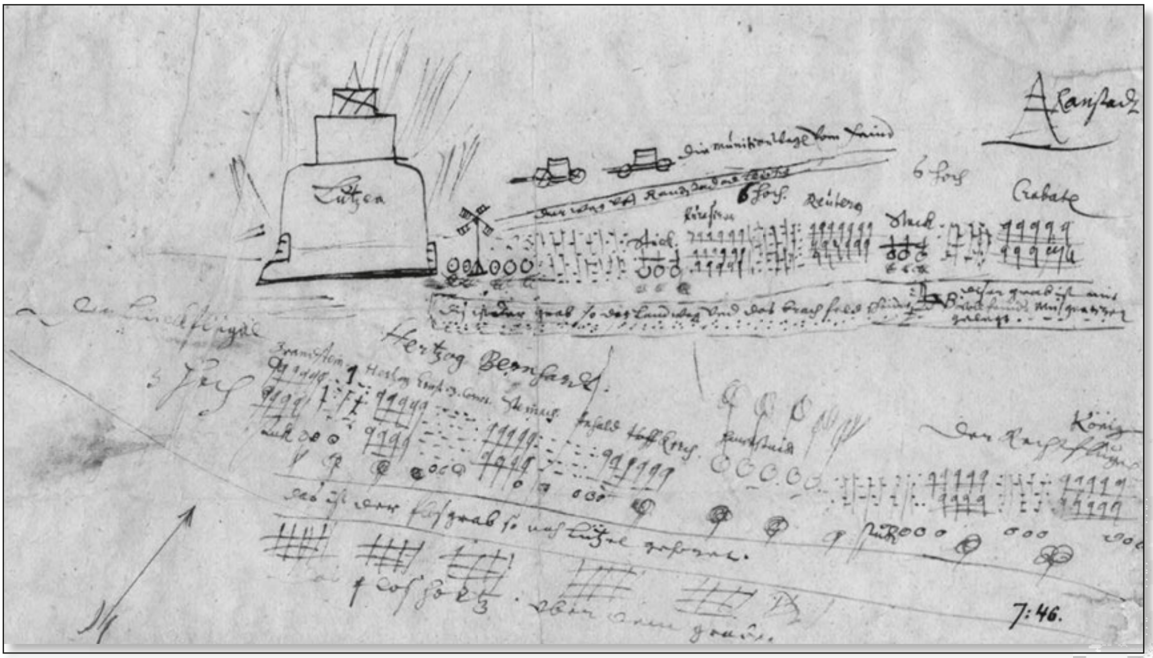
[30] Wertheim, vol. II, p.577; Weber, pp.406–407.



Battle of Lützen in 1632. Sketch drawn by unknown Swedish officer. (Riksarkivet)

Colonel Rabe Wolf von der Lippe's Regiment of Horse
Raised and disbanded in 1645, but despite this appears to have had three commanders: Lippe, Claus Dietrich von Sperreith and Hans Fredrich Pisinger.[31]

Colonel Lohn's Regiment of Harquebusiers
Raised 1621 and by 1638 it had been taken over by George Truckmuller. It was present at the battles of Wittenweier, Freiburg and Allerheim.

Colonel del Maestro's Regiment of Harquebusiers
See Bonninghausen's Regiment.

Colonel Johan von Marcossey's Regiment of Horse
The Lothringian Regiment was five troops strong but was disbanded on 31 May 1621.[32]

Colonel Johan von Marcossey's Regiment of Foot
Raised 26 May 1620, but in October of that year the regiment passed to its lieutenant colonel, Franz von Florainville or Florenville. It was disbanded in 1622.[33]

Colonel Meissinger's Regiment of Foot
Not mentioned by Weber or Goetz, but the regiment is known to have existed in 1635 and mustered five companies. At Wittenweier the regiment's colonel was killed.

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[31] Goetz, p.122.

[32] Wertheim, vol. II, p.578; Weber, pp.406–407.

[33] Goetz, p.123.

Colonel Metternich's Regiment of Cuirassiers

Raised 1636 and mustered 10 companies. It was present at the battle of Wittenweier.

Colonel Metternich's Regiment of Harquebusiers

See Comargo's Regiment

Colonel Heinrich von Metternich's Regiment of Dragoons

Raised 1631 by Genera of Artillery Cratz as a combined dragoon, horse and Croat regiment then in May 1633 the dragoons passed to Johan Wilhelm von Metternich. When Johan was killed at Regensburg on 1 June 1634 the regiment passed to his brother Heinrich and then to his younger brother Wilhelm Hermann von Metternich. The regiment was finally taken over by Lieutenant Colonel Martin Franz von Oettingen.

Present at the battles of Barnberg, Lech, Nuremberg and Nördlingen.[34]

Colonel Modersbach's Regiment of Cuirassiers

Raised 1645 and was present at the battle of Zusmarshausen.

Colonel Levin von Mortaigne's Regiment of Foot

Raised on 18 February 1620 and mustered 2,279 strong in 13 companies, although by 1635 this had been reduced to 10 companies, then 10 years later to eight. In 1626 Jacob Ludwig von Fürstenberg succeeded Mortaigne and then on 20 May 1629 Theodore Comargo, who was killed at the battle of Lützen. He was succeeded by his brother Gabriel Comargo on 24 December 1632, who was killed on 6 July 1634. In July 1634 Johan Puech, or Puck, was appointed colonel, then in 1637 succeeded by Metternich. Finally on 11 May 1639 Colonel and Quartermaster General George Frederich von Holz took over the regiment and commanded it until it was disbanded.

It was present at the battles of Wiesloch, Wimpfen, Höchst, Stadtlohn, Dessau, Lutter, Magdeburg, Werben, Breitenfeld, Maastricht, Lech, Nuremberg, Lützen, Nördlingen, Wittenweier, Rheinfelden, Tuttlingen, Jankau, Freiberg, Allerheim, Herbsthausen and Zusmarshausen.[35]

Colonel Lorenz Munch von Steinach's Regiment of Harquebusiers

Raised 1632 by Colonel and Quartermaster General Munch. When Munch was killed at Memmingen on 19 January 1633 the regiment was divided into two, five troops formed Johann de Werth's Regiment, while the other five formed Colonel Eberhardt von Manteuffel's Regiment. When Mauteuffel was badly wounded at Alesheim on 11 October 1633 the 10 troops were once more united into one regiment and became known and became known as the "Alt-Werth Regiment". Werth was captured at the battle of Rheinfelden. Despite his four years' captivity it was not until 19 July 1647 that Hans Jacob Kolb took command of the regiment.

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[34] Weber, pp.406–407; Engerisser and Hrnčiřík, p.286.

[35] Heilmann, p.903; Bayern Kriegsministerium Kriegsarchiv, vol. I, pp.114–116; Weber, pp.406–407; Wertheim, vol. II, pp.588–589; Engerisser and Hrnčiřík, p.282.

The regiment was present at Lech, Nuremberg, Gerolfing, Nördlingen, Rheinfelden, Wittenweier, Ziegenhain, Tuttlingen, Freiburg, Jankau, Herbsthausen, Allerheim and Zusmarshausen.[36]

Colonel Adrian Birmont van der Nerssen's Regiment of Foot

Raised 1645 and mustered 10 companies, although it was disbanded later that year.

Present at the battle of Zusmarshausen.

Colonel Johann Birmont von der Nerssen's Regiment of Horse

Raised 1620, the regiment passed to Witzleben before being disbanded in 1629.[37]

Colonel Constantine Nivenhaim's Regiment of Harquebusiers

According to Goetz the regiment was raised in 1623 but disbanded the following year. However, Weber states that it was raised in 1625 at Cologne and Jakob Fugger took command later that year. In 1632 Baumgarten took command of the regiment followed two years later by Asseburg who transferred it into Imperial service.

The regiment was present at Lutter, Werben, Breitenfeld, Bamberg, Lech, Nuremberg and Oldendorf.[38]

Colonel Neuneck's Regiment of Harquebusiers

Raised 1633 and later became Johann von Sporck and then Heinrich Zunken's regiment before being disbanded in 1649.[39]

It was present at the battles of Rheinfelden and Wittenweier, and then soldiered in south-west Germany.

Colonel Nussbaum's Regiment of Dragoons

According to Goetz the regiment was raised in 1640, whereas Weber states 1644, though he does admit very little is known about the regiment. In 1645 its command passed to Schoch and two years later it was reduced into Truckmuller and Modersbach's regiments. However according to Wrede in his *K. u K.*, Colonel Caspar Schoch's Regiment was raised in 22 July 1647, entering Bavarian service in 1648. In 1647 it took part in the conquest of Rothweil and other actions for which Schoch and his lieutenant colonel, Flettinger, received a gold chain. The following year the regiment was in Holtzappel's army at Donauwörth.[40]

Present at the battle of Jankau and at many skirmishes.

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[36] Redlich, p.378; Bayern Kriegsministerium Kriegsarchiv, vol. I, p.116; Weber, pp.406–407; Engerisser and Hrnčiřík, p.285.

[37] Goetz, p.121.

[38] Goetz, p.121; Weber, pp.406–407.

[39] Goetz, p.122.

[40] Wrede, vol. III, part 2, p.409; Goetz, p.122; Weber, pp.406–407.

Colonel Gottfried Heinrich von Pappenheim's Regiment of Cuirassiers

In April 1622 the regiment was formed from five companies from Herbersdorf's regiment, plus two new troops, five were cuirassiers while the other three troops were harquebusiers. However in 1624 the regiment entered Spanish service and later became Octavio Piccolomini's Regiment of Horse in the Imperialist service. Despite being a renowned cavalry officer Pappenheim only seems to have commanded a regiment of horse for these two years.

The regiment was present at the battles of White Mountain, Bruchsal, Wiesloch, Wimpfen, Lorscher Heide, Höchst and Stadtlohn.[41]

Colonel Gottfried Heinrich von Pappenheim's Regiment of Foot

The regiment is said to have had its origins in Johan Ernest von Sprinzenstein's Regiment in 1622, but Goetz's accounts for the regiment end in 1631, by which time it had passed to Colonel Gottfried Hubner. Whereas the accounts for Gottfried Heinrich von Pappenheim's regiment begin in 1626, although other sources state that he took over Hubner's Regiment the following year.

After Pappenheim's death at the battle of Lützen the regiment passed to his son, Adam Wolfgang von Pappenheim, although due to Adam's youth it was commanded by Lieutenant Colonel Hans Gunter. It was known as "Alt" (Old) Pappenheim's Regiment.

The regiment later passed to Casper Schnetter and then Hans Ulrich Gold. Then Colonel Johann von Winterscheid took command on 24 June 1641. The regiment was disbanded on 25 September 1649 at Memmingen.

At the battle of Breitenfeld it lost about 1,800 out of its 2,000 men, including its Colonel Filip who was killed.

Present at the battles of Höchst, Stadtlohn, Eferding, Magdeburg, Werben, Breitenfeld, Bamburg (9 March 1632), Lech, Nördlingen, Rheinfelden, Breisach, Wittenweier, Wolfenbüttel, Freiburg, Tuttlingen, Herbsthausen, Allerheim and Zusmarshausen.[42]

Colonel Gabriel Pechmann's Regiment of Foot

Not listed by Weber, but according to Goetz it was raised 1622 and disbanded 1623.[43]

Colonel Johann von Rauschenberg (or Ruschenberg)'s Regiment of Foot

Not listed by Weber, but according to Goetz it was raised in 1640. It was later commanded by Hans Wilhelm von Hunoltstein, then by Adrian von Enkenfort, before being disbanded in 1646.[44]

Colonel Redetti's Regiment of Cuirassiers

Raised 1635 and was present at the battle of Wittenweier where Redetti was killed.

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[41] Wertheim, vol. II, p.578; Weber, pp.406–407.

[42] Goetz, pp.122–123; Weber, pp.406–407; Engerisser and Hrnčiřík, p.282.

[43] Goetz, p.122; Weber, pp.406–407.

[44] Weber, pp.406–407.

Colonel Reinach's Regiment of Foot
See Schmidt's Regiment

Colonel Rouyer's Regiment of Foot
See Haimhausen's Regiment

Colonel Franz von Royer's Regiment of Foot
Raised 13 March 1643 and disbanded 1647.[45]

Colonel Nichola Rouville's Regiment of Foot
Also known as the Lothringen Regiment. In January 1621 it mustered just four companies and in August 1621 was reduced into Anholt's Regiment.[46]

Colonel Hans Christopher von Ruepp's Regiment of Foot
Raised 1632 by Colonel von Ruepp. On 20 April 1635 the regiment's lieutenant colonel, Hans Jacob von Edlinstetten, took over the regiment. According to Goetz he was succeeded by Colonel Frederick von Puech on 19 April 1643 who commanded it until 1649 when it was disbanded. However Weber states that in 1638 Franz von Fugger took command of the regiment, although Heilmann gives the date of 19 March 1643 for this and he command it until its disbandment in 1649.

The regiment was present at the battles of Nördlingen, Wittenweier, Jankau, Freiberg and Allerheim, and Zusmarshausen.[47]

Colonel Salis' Regiment of Harquebusiers
See Eynatten's Regiment

Major General Hans Wolf von Salis' Regiment of Cuirassiers
See Eynatten's Regiment

Major General Hans Wolf von Salis' Regiment of Foot
See Werth's Regiment of Foot

Colonel Valentine Schmidt's Regiment of Foot
Raised 18 August 1620 and composed of 10 companies of about 1,800 strong. It was raised in Upper Austria, but entered Bavarian service. In 1626 Hans Heinrich von Reinach succeeded Schmidt as commander. Then on 22 August 1637 Melchior Reinach. The next inhaber was Hans Phillip von Hagenbach on 22 October 1640, then Josef Rupert Enschering on 27 June 1644. However he only commanded the regiment for a short time, as the following year Field Marshal Graf Geleen took over the regiment. On 9 November 1645 Geleen was succeeded by Graf Gronsfeld and then by Karl Reveu de la Folie on 12 July 1648, who commanded it until 1649 when the regiment was disbanded.

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[45] Weber, pp.406–407.

[46] Wertheim, vol. II, p.590.

[47] Goetz, p.12; Weber, pp.406–407; Heilmann, vol. II, p.1130.

Present at the battles of White Mountain, Wiesloch, Wimpfen, Höchst, Stadtlohn, Lutter, Magdeburg, Werben, Breitenfeld, Nördlingen, Rheinfelden, Wittenweier, Wolfenbüttel, Tuttlingen, Freiberg, Allerheim and Zusmarshausen.[48]

Colonel Caspar Schnetter's Regiment of Foot
Raised 1633 and disbanded in 1638.

Present at the battles of Rain, Nördlingen, Wittenweier and Breisach.

Colonel Schoh's Regiment of Dragoons
See Nussbaum's Regiment

Colonel Schonberg's Regiment of Cuirassiers
See Herzelle's Regiment

Major General Nicholas Dietrich von Sperreuter's Regiment of Harquebusiers
Raised 1639 and by1648 it had been taken over by Heinrich Zink von Glesch.

Present at the battle of Zusmarshausen.

Major General Klaus Dietrich Freiheer von Sperreuter
Raised 1645. On 11 July 1646 it was taken over by Colonel Waldbott.[49]

Colonel Johann von Sporck's Regiment of Harquebusiers
Raised 1638 and consisted of 10 companies which included a detachment of dragoons. On 19 July 1647 the regiment was taken over by Zink von Glesh.

Present at the battles of Wolfenbüttel, Tuttlingen, Freiburg, Jankau, Herbsthausen, Allerheim and Zusmarshausen.

Colonel Johann Ernest von Sprinzenstein's Regiment of Foot
Raised 1622 and composed of 10 companies. On 19 March 1624 Lieutenant Colonel Gottfried Hubner was promoted colonel and took over the regiment until 1624. The accounts for the regiment go up to 1631, although it is believed that the regiment was taken over by Gottfried von Pappenheim in 1626. For a possible later history of the regiment see Pappenheim's Regiment of Foot.[50]

Colonel Albing Count von Sulz's Regiment of Foot
Raised 1619 and disbanded in 1623.[51]

Lieutenant General Johann von Tilly's Regiment of Foot
See Colonel Truchsess' Regiment of Foot

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[48] Heilmann, p.903; Bayern Kriegsministerium Kriegsarchiv, vol. I, pp.114–116; Weber, pp.406–407. Wertheim, vol. II, pp.591–592.

[49] Bayern Kriegsministerium Kriegsarchiv, vol. I, p.116; Weber, pp.406–407.

[50] Guthrie, p.35; Weber, pp.406–407; Wertheim, vol. II, p.590; Bayern Kriegsministerium Kriegsarchiv, vol. I , pp.114–116.

[51] Goetz, p.122.

Colonel Werner von Tilly's Regiment of Foot
See Haimhausen's Regiment

Colonel Truchsess' Regiment of Foot
See Colonel Bauer's Regiment

Colonel George Truckmuller's Regiment of Harquebusiers
According to Weber the regiment was raised in 1634, but Goetz states 1639. On 21 December 1643 the regiment passed to Colonel Cosalki. The regiment also seems to have a detachment of dragoons attached to it.

Present at the battles of Wittenweier, Ziegenhain, Wolfenbüttel, Tuttlingen, Freiburg, Herbsthausen, Allerheim and Zusmarshausen.[52]

Colonel Vehlen's Regiment of Cuirassiers
The regiment was raised in 1635 and was present at the battle of Wittenweier.

Colonel Walcott's Regiment of Cuirassiers
Raised 1642 and was present at the battle of Zusmarshausen.

Colonel Hans Jakob von Waldbott's Regiment of Horse
Raised 1634 and later commanded by George Heinrich von Fleckenstein. The regiment was disbanded in 1648.[53]

Colonel Albrecht von Wartenberg's Regiment of Horse
Raised 1621 with four troops and disbanded the following year.[54]

Major General Johann de Werth's Regiment of Harquebusiers
See Eynatten's Regiment

Major General Werth's Regiment of Dragoons
The regiment was originally commanded by Cronberg, but after his death on 8 August 1634 it passed to its lieutenant colonel, Hans Christoph Ganss von Otzberg. Ganss did not command the regiment for long since he was killed at the battle of Nördlingen on 24 August 1634, and it passed to Werth four days later. In 1635 or 1636 the regiment passed to Colonel Johan Wolf. On 21 November 1644 Wolf was killed while storming the town of Bensheim and the regiment passed to a Colonel Kreutz. When Kreutz entered Imperialist service Colonel Johann Bartl took over the regiment on 19 July 1647, and commanded it until 1649 when the regiment was disbanded.

Present at the battles of Nördlingen, Rheinfelden, Wolfenbüttel, Wittenweier, Tuttlingen, Freiburg and Allerheim, Herbsthausen, and Zusmarshausen and many skirmishes.[55]

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[52] Goetz, p.121; Weber, pp.406–407.

[53] Goetz, p.122.

[54] Goetz, p.122.

[55] Engerisser and Hrnčiřík, p.286.

Major General Johann von Werth's Regiment of Foot
Raised 1632 by Johann von Werth, but in 7 March 1643 it passed to Hans Wolf von Salis. He died in captivity on 6 April 1640 and the regiment passed to Duke Ulrich von Württemberg.[56]

Present at the battle of Nördlingen.

Colonel Joachim Christian von Wahl's Regiment of Foot
See Colonel Dietrich Ottmar von Erwitte's Regiment

Colonel Wartenberg's Regiment of Cuirassiers
Raised 1632 and mustered 10 companies. Present at the battle of Wittenweier.

Colonel Johann Wolf's Regiment of Dragoons
See Cronberg's Regiment of Dragoons

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[56] Goetz, p.122; Weber, pp.406–407.

Appendix III

Captured Protestant Colours

Regimental Colours Captured at the Battle of White Mountain by the Spanish–Catholic League Army[1]

An arm coming from a cloud towards a cannon, drum, muskets and pikes with the motto, “Nori Fine Causi” on the other side a hand holding a sword with the motto, “Non dormit, qui custodit nos”

A colour with the motto “ETSI” in gold thread

A white and red colour with the motto, “Cum gaudio incipis cum felicitate”

A black colour with starred silver flames and man riding a white horse bearing a sword in his month and three crowns in his hand, with the motto, “Deus fortitude mea”

A centurion in mail treading on a green, purple and turquoise Medusa with the motto, “Justurn Dei indicium”

A purple colour with two crowns, without inscription

A colour with the motto, “Si prudantia non desit Fortunae Satia”

Small flames five rows with the motto, “Virtute”

A similar colour but with the motto, “Post rhubila phoebus” and “Vincit Constantia mentis”

A Maltese Cross with the motto, “Si Pruentia non digit”

A turquoise colour with a crowned gold lion holding a heart with the motto, “Pro conscientia et Patriae Liberate”

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[1] Lobkowitz, pp.400–424.

A white colour with gold flames with a hand emerging from a cloud holding a pair of scales and weighing the world and the Imperial Diadem and with the motto "In honore requiem"

A red colour with a naked Jesus with the motto "Considite Ego Vici"

A prancing crowned lion with the motto "Abissima Fortundo"

A woman holding a sword in her left hand and a pair of scales in the other with the motto, "Ich liebe Gott und dit gerechtigen"

An angel holding a cup, with the year "1619"

A hand emerging from a cloud holding a sword with the motto "Von domit qui cupodit"

A ball with turquoise bands with the motto,"Contero"

A green arc behind a golden orb with the motto "Florebo prospiliate Deo"

A yellow colour with an anchor and a turquoise world with the motto "Spefirmus"

A colour with a red orb and a crowned lion in the middle with the motto "Honestu in pro Patria mori"

A colour bearing the image of Justice in Damascene purple holding a pair of scales, with the motto, "Utra?"

Regimental Colours Captured from Mansfeld's Army at the Battle of Stadtlohn in 1623

Colours of double thickness taffeta

Three red colours with blue flames

A gold colour and there in of the Virgin in armour with this motto "Revirescrit".

A mounted cuirassier with the motto "Pro patria mori dulce & decorum est".

Two hands holding a ring with a large diamond with the motto "Nec ignit nec ferro cedo"

A torn colour with the image of Fortuna surrounded by four crowned virgins

A pelican tearing at its breast and the motto "Quod in te est, est pro me"

A large wreath there in the motto "Chacun Chancon"

An armoured hand with a naked sword out of the clouds with the words "Fiat Iustitia & pereat mundas"

An olive branch and the words "Montour viendra"[2]

Regimental Colours Captured from the Imperialist Army at the Battle of Wittenweier in 1638

The cornet of the Guard company of Goetz, made of blue damask with a cross of Burgundy, silver embroidery with the motto "Pro Imperatore et Fide"

A red standard of the Goetz's Guard regiment with a cross of Burgundy with the motto "Pro Imperatore et Fide"

A white standard of a company of Savelli's Guard with a gold arm holding a sword and the other side an eagle, all embroidery gold with the motto "Viva Austria and Spanya"

A white standard with the knight of St George on one side with this symbol. "Audents Fortuna Junat" and on the other side the image of Virgin Mary and with the motto "Sperans in Deum Mortem non vereor"

A Red standard with the motto "Pro Imperatore et Rege"

Two red standards with the motto "Alacriter aggredere honoratus abibes"

A red standard with the mark of the Jesuits and the motto "Sape insperata Veniunt"

A green standard with an armoured arm and a naked sword and the motto "Audebo Deus Efficiet"

A white standard with the motto "Contre variable Fortune bon coeur"

A green standard with this motto "Patientia aimis lasa fit furor"

A white standard with the Jesuit's mark embroidered in gold on one side and on the other these letters “MR”

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[2] Nichollas Bellus Ostreichischer Lorberkrantz oder Kayserl, *Ostreichischer Lorberkrantz oder Kayserl, Victori. Das ist: warhafftige, eigentliche vnd aussführliche historische Beschreibung aller … Sachen vnd Händel, so sich in geistlichen, politischen auch Kriegssachen bey Regierung weyland Keysers Matthiæ … vnd der jetzigen regierenden … Majestät Ferdinando II. in diesem noch werenden sechsjährigen … Krieg … in- vnd ausserhalb des H. Römischen Reichs von dem 1517. Jahr bey gewesener Union zugetragen vnd verlauffen, biss auff dieses 1625. Jahr continuirt, etc.* (Frankfurt am Main: Durch E Kempffern, 1625) p.50.

Infantry

A white ensign with an échelle and the eschelon’s marque of the name of courage and the motto “Nemo vepits ad patrem nisi per me”

A white ensign with the image of the Virgin Mary with the motto “Martis Dei Memento Mei”

A white ensign with an armoured arm and a hammer and 2 nails and this motto ”Malleus Hareticorum” and on the other side “Elaves Confixerunt Eum”

A white ensign, with a white cross without a motto

A white ensign with the image of the Virgin Mary a red cross of Burgundy and an armoured arm with a sword and this motto, “Pro Rege et Lege” and in the middle “Subtuum prasidium Confupinus” and on the other side Fortuna and this motto “Non omnibus aqua”

A white ensign and this motto “Vivat Ferdinandus III et Ferdinandus IIII”

A White ensign with these letters “F III”

A blue ensign and in the middle a rooster with this motto “Gallus Excitat Jacentes” and on the other side “Extollit Fortes in Bello”

A blue ensign where there is having a game bird and a hen with chicks and this motto “Evaserunt” and above the hen, “Congregasti nos Domine Sicut Gallina pullos suos”

A blue ensign with this motto “Qui tuos destruere volunt Mare exhaurire Conantur nam forsan petri Naviculam Fluctuantem, nunquam submergentem videbunt”

A blue ensign which has an armoured arm of an coming out of an image with a balloon and this motto “Qui Ceridisse nocet”

A white ensign and a square and this motto “Effundam Super vos Aquam Mundam” and on the other side “Lavabit manus suas in Sanquin Peccatoris”[3]

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[3] TNA, SP 81/45, ff.125–126.

Appendix IV

The Strengths of the Bavarian Militia

In 1622 the militia companies mustered the following.

Source: Heilmann, vol. 2, part 2. p.1079

Company	**Sword & Bucklers**	**Broadswords**	**Halberdiers**	**Pikes**	**Muskets**	**Rifled Muskets**	**Total**
Landsburg	5	5	25	205	130	93	463
Haag	5	10	15	165	113	126	434
Wolfrathshausen	5	5	20	267	100	93	490
Tolz	5	5	9	77	68	70	234
Dachau	-	10	20	208	180	102	520
Schongau	5	6	19	192	138	116	476
Friedberg	-	8	12	106	72	53	251
Rosenheim	5	10	18	143	181	103	460
Wasserburg	5	10	40	172	187	94	508
Erding	5	5	20	214	180	86	510
Landau	5	5	20	190	144	86	450
Teispach	5	5	20	168	113	91	402
Eggmuhl	-	10	20	160	131	86	407
Moosburg	-	10	20	128	121	33	312
Straubing	5	10	20	204	131	106	476
Stadtamhof	5	4	15	115	95	70	304
Kelheim	5	5	10	141	113	46	320
Kotzting	-	10	20	125	104	62	321

Company	**Sword & Bucklers**	**Broadswords**	**Halberdiers**	**Pikes**	**Muskets**	**Rifled Muskets**	**Total**
Hengersberg	5	5	20	143	154	126	453
Osterhofen	5	5	20	92	100	60	282
Braunau	-	5	5	154	100	65	329
Scharding	-	4	4	185	99	94	386
Ried	5	6	6	89	59	36	201
Friedburg	5	-	20	166	106	80	377
Oetting	5	-	10	151	103	67	336
Eggenfelden	5	-	10	265	200	75	555
Reichenberg	5	-	10	242	120	112	489
Burghausen	5	-	10	143	89	68	315
Traunstein	5	5	15	123	86	68	302
Pfaffenhofen	-	10	20	110	139	67	346
Abensberg	-	10	10	129	88	67	304
Dietfurt	-	12	10	141	137	24	324
Aichach	-	5	20	110	91	62	297
Rain	5	5	19	127	124	55	335
Ingolstadt	-	10	22	154	174	-	360
Munich	-	-	-	-	800	-	800
Landshut	5	-	29	119	176	49	378
Straubing	5	11	19	81	183	-	299
Wemding	4	-	27	156	296	-	483
Landsberg	5	-	-	105	120	24	254
Furth	-	-	-	-	400	-	400
Total	5,974	649	231	134	6,245	2,715	15,948

Muster of Militia Companies in 1641

Source: Heilmann, vol. 2, part 2. p.1081

Company	Sword & Bucklers	Broadswords	Halberdiers	Pikes	Muskets	Rifled Muskets	Total
Haag	5	10	15	185	113	126	434
Wasserburg	5	10	40	172	187	94	508
Traunstein	-	-	-	148	87	67	302
Rosenheim	-	10	18	143	181	103	455
Tolz	5	5	9	77	68	70	234
Wolfrathshausen	5	5	20	267	100	93	490
Schongau	5	6	19	192	138	116	476
Landsberg	5	5	25	205	130	93	463
Fiedberg	-	8	12	106	72	53	251
Aichach	-	5	20	119	91	62	297
Wemdig	4	11	27	156	296	-	494
Rain	-	11	19	127	124	55	336
Pfaffenhofen	-	10	20	110	139	67	346
Abensberg	-	-	20	129	88	67	304
Dachau	-	10	20	208	180	103	521
Erding	5	5	20	214	180	86	510
Teisbach	5	5	20	168	113	91	402
Landau	5	5	20	190	144	86	450
Eggmuhl	-	10	20	160	131	86	407
Osterhofen	5	5	20	92	100	60	282
Pfarrkirchen	-	-	10	238	118	107	473
Eggenfelden	-	-	-	278	201	73	552
Moosburg	-	10	20	128	121	33	312
City of Strauberg	5	-	19	81	183	-	288
Land of Strauberg	-	10	20	193	138	103	464
Kotzting	-	-	30	37	194	59	320
Furth	-	-	20	-	160	119	299
Hengersberg	-	10	20	143	154	126	453
Stadtamhof	-	10	20	122	84	72	308

Company	Sword & Bucklers	Broadswords	Halberdiers	Pikes	Muskets	Rifled Muskets	Total
Kelheim	5	-	15	141	113	46	320
Dietfurt	-	12	10	133	140	31	326
Burghausen	-	-	10	142	88	68	308
Friedburg	-	-	20	170	106	80	376
Oetting	5	-	10	147	107	67	336
Braunau	-	-	10	154	100	65	329
Ried	-	-	10	99	50	44	203
Scharding	-	-	-	193	99	94	386
Ingolstadt	-	10	22	154	174	-	360
Landshut	5	-	29	176	176	49	378
Munich	-	-	29	400	400	-	800

Muster of Militia Troops in 1615

Heilmann, vol. 2, part 2, pp.819–820

Troop	Raised In
1	Schwaben, 27; Wasserburg, 14; Haag, 12; Traunstein, 20; Marquardstein, 7; Reichenhall 5; and Rosenheim, 17. Total 102 troopers.
2	Aurburg, 2; Aibling, 32; Tolz, 13; Wolfrathshausen 44; and Starnberg, 11. Total 102 troopers.
3	Weilheim, 41; Schongau, 7; Rauhenlechberg 5; and Landsberg, 59. Total 112 troopers.
4	Mering, 7; Freidberg, 21; Aichach, 36; Rain 21 and Schrobenhausen, 17. Total 102 troopers.
5	Pfaffenhofen, 39; Krandsberg, 25 and Dachau. 33. Total 97 troopers.
6	Abensberg, 14; Reustadt, 5; Mainburg, 9; Reidenburg, 10; Bohburg, 21; Kosching, 3; Gerolfing, 1; City of Ingolstadt, 7; Schwabeck 5 and Munich, 17. Total 92 troopers.
7	City of Landshut, 12; Dorfen, 3; Erding, 49; Moosburg, 29 and the territory of Wolnzach, 3. Total 96 troopers.
8	Rottenburg, 30; Kirchberg, 17; Eggmuhl, 1; Teisbach, 27; Dingolfing, 20; Biburg and Geidenhausen, 25. Total 120 troopers.
9	Landau, Ratternberg, Osterhofen, Bilshofen, Hals and Reisbach

Troop	Raised In
10	Greisbach, 32; Pfarrkirchen, 21; Eggenfelden 36; and Neumark, 21. Total 110 troopers.
11	Vilsbiburg, 22; Geisenhausen, 3; City of Straubing, 9; Province of Straubing,16; Leonberg, 3; Haidau, 19; Donauftaut, 7; Stadtamhof, 5; Abach, 2 and Kelheim, 29. Total 90 troopers.
12	Dietfurt, 4; Mitterfels, 38; Kotzting, 12; Biechtach, 9; Regen, 9; Deggendorf, 8; Hengersberg, 17; Bernstein, 9; Diesenstein 1 and Furt 16. Total 130 troopers.
13	City of Burghausen, 6; Uttendorf, 3; Braunan, 35; Wildshut, 5; Mauerkirchen, 28 and Julbach, 9. Total 86 troopers.
14	Tribunal of Burghausen, 3; Scharding, 49; Oetting 39 and Friedburg, 16. Total 107 troopers.
15	Reid, 27; Mermosen, 3; Kraiburg, 6; Trostberg, 11; Kling, 35 and the Dominion of Aschau, 4. Total of 86 troopers.

Muster of Jäger Companies in 1645

Source: Heilmann, vol. 2, part 2, p.832

Town	No. of men
Traunstein	299
Eggenfelden	588
Pfaffenhofen	454
Wolfrathshausen	340
Landau	423
Schongau	305
Haag	435
Pferrkirchen	486
Friedburg	389
Landsberg	262
Friedberg	395
Abensberg	182
Rain	398
Rosenheim	456
Scharding	396
Erding	446

Town	**No. of men**
Tolz	247
Wasserburg	520
Braunau	328
Reid	210
Teisbach	405
Hengersberg (Deggendorf)	460
Kotzting, Mitterfels & Furth	500
Kelheim	460
Oetting	345
Osterhofen	280
Munich	600
Landshut	303
Burghausen	322
Straubing	215
Ingolstadt	385
Donauworth	237

Colour Plate Commentaries

Figure Plates

Illustrations by Sergey Shamenkov

A – Cuirassier
This trooper is equipped in the full suit of armour, which protects him from his enclosed burgonet helmet to his knees. It is blackened either with oil or paint to prevent damage by rust. Other than his sword, this man would have been armed at least with a pair of pistols, possibly more. The city of Nuremberg in Bavaria was noted as a supplier of cuirassier armour, and whilst this complete set of armour was the ideal, it is unlikely that every cuirassier regiment achieved this level of defensive armour for all those within the ranks. The high cost of armour and that of suitable horses to mount the trooper, coupled with the weight of the equipment, was to be the undoing of the cuirassier. Increasingly, cavalry armour became lighter and by the end of the war in 1648 most cuirassiers were found to be wearing a helmet and backplate and breastplate.

B – Reiter
Like the cuirassier, the reiter or harquebusier began the war more heavily armoured than at the end of the conflict. This well-dressed soldier is possibly an officer as he his wearing a scarf around his waist. Of no insignificant cost is the sleeveless buff coat he is wearing. The buff coat was flexible, tough, and in favourable circumstances able to turn the blade of a hacking sword brought down on the wearer.

C – Musketeer
The increasing size of armies affected, among other things, clothing supply. The town of Reichenberg in Bavaria had 21 mills in 1621, all supplying cloth to Wallenstein. Such was the demand that by 1634 an extra 76 mills had been established. This musketeer is wearing a cassock, as depicted in the paintings of the battle of White Mountain now housed in the St Maria della Victoria church in Rome. Surviving examples of such coats are in the collections at the Hermitage Museum, St Petersburg and the Saxon State Museum services. Coat issues of grey and blue are recorded for the Bavarian Army. Nuremberg was one of Europe's largest producer of arms for the Imperial cause, and it is likely that our man has been issued with his musket, bandoliers, sword and

other military accoutrements from that city.

D – Pikeman
This pikeman is very well equipped and seems to have benefited from the armament manufacturing centres of Nuremberg and Suhl, which supplied the Catholic League and Imperialist forces with copious amounts of equipment. The use of tassets, the lower thigh armour attached to the breastplate, seems to have declined in the 1620s but saw a revival from the early 1630s. this man is depicted in a posture known as 'charge your pike for horse', which was a defensive drill posture taken up to counter enemy cavalry attempting to press home an attack.

E – Infantry Officer
The rather elaborate halberd signifies that this figure is an officer, whilst the blue scarf (often mistakenly called a sash) identifies him as an officer in the Bavarian Army in the second half of the 1630s. He wears an expansive sleeved buff coat, for protection from the elements as much as from the enemy.

F – Croat
The term 'Croat' or 'Crabat' was given to light cavalrymen regardless of their country of origin. Recruited from Poland and amongst the Cossacks, they acted as scouts and raiders, disrupting enemy supply lines and civilian populations. This Croat is dressed traditionally in a Turkish-style coat. He is equipped in typical fashion with carbine, sword and daggers. His pistols are likely to be holstered with his horse. He has been caught in the act of what Croats seemed to excel at: looting.

Front Cover – a fully equipped red-coated veteran pikeman.

Bavarian Standards from the Armémuseum in Stockholm, Sweden

Plates G–N, see plates for details
Artwork for Plates O and P drawn by Mats Elzinga

Plate O – Infantry Colours

Mercenary infantry colour (top)
Irish mercenaries fought on both sides in the Thirty Years' War. For many younger members of the lesser and dispossessed Irish nobility, fighting as a mercenary across Europe was an escape from penury and boredom. This Bavarian infantry colour displays its Irish identity through the Irish national colours of orange and green and the Irish patron St Patrick. The phrase S. PATRITIVS ARCHIEPISC means "St Patrick Archbishop"' The obverse has the same design with a picture of the Holy Virgin and motto CLYPEVS OMNIBVS IN TE SPERANTIBVS ("Shield for all who take refuge in you"). Source: Armémuseum Stockholm, AM.081223.

Turkowiz infantry colour (bottom)

In his 'Augsburger Annalen', Benedictine monk Reginbaldus Möhner drew 10 company colours of regiments Mörsberg and Befort, present in Augsburg at the start of the Thirty Years' War. At that time the design of the company flag was up to its commander's taste, lacking cohesion within a regiment. This colour of Hauptmann Turkowiz is an early example of the use of Bavarian colours and the ducal coat of arms. Source: J. Kraus, *Bayerische Fahnen: Die Fahnen und Standarten des bayerischen Heeres vom 16. Jahrhundert bis 1918* (Vienna: Verlag Militaria, 2018).

Plate P – Cavalry and Dragoon Cornets

Cavalry standard of Maximilian of Wittelsbach (top left)

As was customary at the time, many commanders displayed their cyphers in various ways on their colours. The bold 'M' shown here was used by Maximilian I "the Great", Elector of Bavaria (1573–1651). The encircled "M" is combined with a Burgundian cross. Variants in white, green, black and gold are also known, predominantly on a blue field.. Source: H. Kühlmann, *Geschichte der Bayerischen Fahnen und Standarten und der Feldzeichen der in Bayern aufgegangenen Staaten* (München: 1959).

Cavalry standard of Pappenheim (top right)

A traditional display, this rather complex Pappenheim family coat of arms is the centerpiece of a black standard, possibly captured by the Swedes after taking Pappenheim Castle in 1633. The text reads, 'Mitt Freuden Dran, Mitt Glück Darvon', freely translated as 'With joy to it, With luck from it', possibly referring to war or battle. The crossed red swords over a black and silver field denote Pappenheim's status as *Reichsmarschall*. Source: Armémuseum, Stockholm, AM.081232.

Dragoon guidon (bottom)

This rare surviving example of a Bavarian dragoon guidon features a common Catholic theme, the crucifixion. The texts are IESVS NASARENVS REX IVDEORVM ("Jesus of Nazareth, King of the Jews"); TITVLVS TRIVMPHALIS AB OMNIBVS ME DEFENDAT MALIS ("May the fame of triumph protect me from all that is evil"); IN HOC SIGNO VINCES ("In this sign you shall conquer"). Arne Danielsson of the Swedish State Trophy Collection concluded that because of the inscription on the reverse side, MARIA MATER DEI ORA PRO ME ("Mary Mother of God pray for me") the guidon might have been a colonel's colour designed personally for Maximilian I, Elector of Bavaria, and not merely an ordinary dragoon guidon where ORA PRO NOBIS ("Pray for us") would have been more appropriate. Source: Armémuseum, Stockholm, AM.081526, with special thanks to Lena Engquist Sandstedt.

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SP 9/-	State Papers, Williamson Collection, pamphlets and miscellaneous
SP 16/-	State Papers of Charles I
SP 77/-	State Papers, Flanders
SP 78/-	State Papers, France
SP 80/-	State Papers, Holy Roman Empire
SP 81	State Papers, German States
SP 82/-	State Papers, Hamburg and Hanse Town

SP 83/-	State Papers, Holland and Flanders
SP 84/-	State Papers, Holland
SP 94/-	State Papers, Spain
SP 95/-	State Papers, Sweden
SP 96/-	State Papers, Switzerland
SP 101/-	State Papers, Foreign Newsletters
E403/-	Exchequer Records
WO49/57	Debenture books, 1626

British Library, London

Add MS 39288	Transcripts of State letters and papers, 1521–1631
Add MS 18 981	Sir William Vavasour: Letters: 1643–1648
Harl 390	Collection of letters of Joseph Mead, Jan 1626–Apr 1631
Harl MS 6344	A short military treatise concerning all things military
Harl MS 7364	A book of tactics in Charles I's time
30000 (5)	Plan of Magdeburg, 1631

House of Lords Record Office

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GD406/1/234 Alexander Leslie and other generals, Brandenburg, on behalf of the marquis of Hamilton, ordering the provision of 500 suits of cloth and shoes and stockings in proportion, for the soldiers, 1 Nov 1631

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DR762/332 Fragment of a banner taken by Gustavus Adolphus during the 30 Years War, from his tomb in the cathedral of Stockholm

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The Bavarian Army has been overshadowed by those of Gustavus Adolphus and Wallenstein, but it was one of only a few armies to have fought throughout the Thirty Years War, first as part of the Catholic League and then an independent army after the Peace of Prague. Among the generals of the Bavarian Army were Count Johann von Tilly and Gottfried von Pappenheim, two of the most famous generals of the war. This book covers not only the Bavarian Army's organisation, but also has chapters on recruitment, officers, clothing, weaponry, pay and rations of a soldier during the Thirty Years War.

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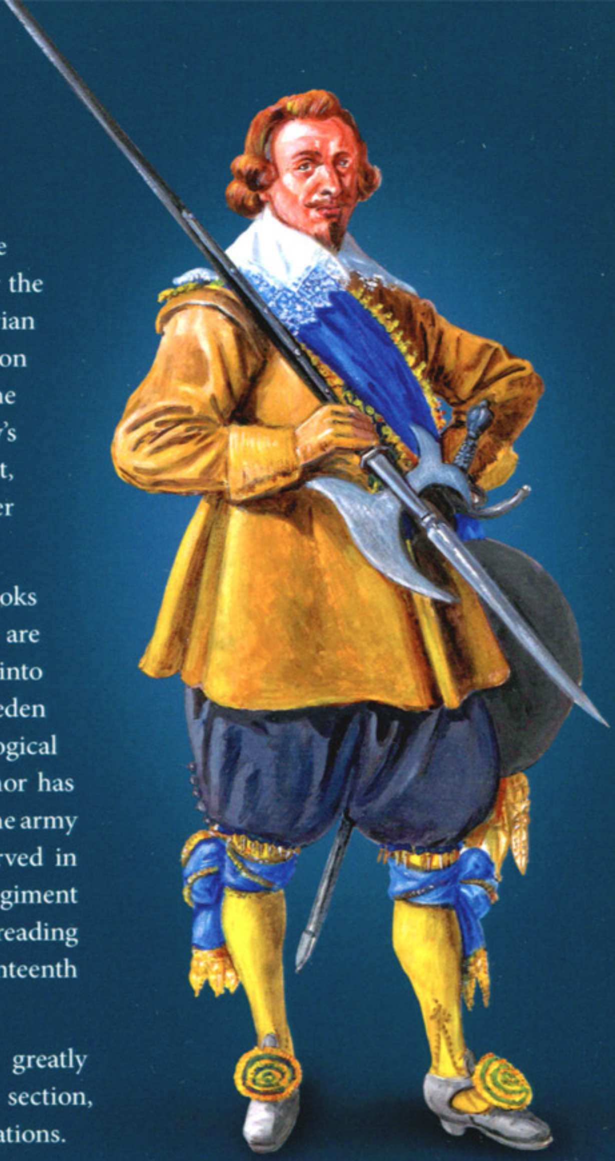

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